

SEALEY

VARIABLE SPEED FLOOR STANDING PILLAR DRILL

MODEL NO: **GDM200F/VS**

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 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. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products. You may obtain an RCD by contacting your local Sealey stockist.

If the product is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Appliance Test) tested.

Electrical safety information, it is important that the following information is read and understood.

- 1.1.1. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
- 1.1.2. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.
- 1.1.3. **Important:** Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating in these instructions.

- * **DO NOT** pull or carry the appliance by the power cable.
- * **DO NOT** pull the plug from the socket by the cable.
- * **DO NOT** use worn or damaged cables, plugs or connectors. Ensure that any faulty item is repaired or is replaced immediately by a qualified electrician.

- 1.1.4. This product is fitted with a BS1363/A 13 Amp 3 pin plug.

If the cable or plug is damaged during use, switch the electricity supply and remove from use.

Ensure that repairs are carried out by a qualified electrician.

Replace a damaged plug with a BS1363/A 13 Amp 3 pin plug. If in doubt contact a qualified electrician.

a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.

b) Connect the BROWN live wire to the live terminal 'L'.

c) Connect the BLUE neutral wire to the neutral terminal 'N'.

Ensure that the cable outer sheath extends inside the cable restraint and that the restraint is tight.

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.

- ✓ Maintain the drill in good condition (use an authorised service agent).

- WARNING!** Keep all guards and holding screws in place, tight and in good working order. Check regularly for damaged parts. A guard, or any other part, that is damaged must be repaired or replaced before the tool is next used, to ensure that it will operate properly and perform its intended function. The safety guard is a mandatory fitting where the drill is used on premises covered by the Health & Safety at Work Act.

- ✓ Check alignment of moving parts and check for possible broken parts.

- ✓ Replace or repair damaged parts. Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.

- ✓ Ensure that the head frame set screws are tight before using the drill.

- ✓ Secure the drill to a supporting structure to avoid the machine tipping, sliding or walking. Drill is designed for use with drill bits and mortice attachments only. No other accessory may be used.

- ✓ Ensure the chuck is securely fastened to the spindle.

- ✓ Remove chuck keys and wrenches from the machine and work area before switching on.

- ✓ Use clamps or a vice (not included but available from your Sealey stockist). **DO NOT** secure the workpiece by hand.

- ✓ Refer to speed chart for recommended drilling speeds.

- WARNING!** Always wear approved eye or face protection when operating this drill. Use a face or dust mask if dust is generated.

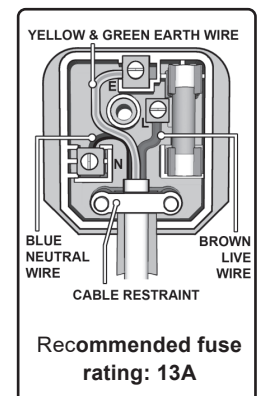
- ✓ Others in the workplace should keep a safe distance from the drill, especially when it is in operation.

- ✓ Keep drill bits clean and sharp for best and safest performance. Follow the instructions for lubrication and changing accessories.

- ✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain long hair.

- ✓ Locate drill in a suitable work area and keep area clean and tidy and free from unrelated materials. Ensure that there is adequate lighting.

- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.



- ✓ Secure unstable workpieces with a clamp, vice or other adequate holding device.
- ✓ Avoid unintentional starting.
- ✗ **DO NOT** use the drill for a task that 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 it is damaged.
- ✗ **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 wipes 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** operate the drill if any parts are missing as this may cause failure and/or personal injury.
- ✗ **DO NOT** leave the drill operating unattended.
- ✗ **DO NOT** operate the drill when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✗ **DO NOT** pull the cable from the power supply.
- ✓ When not in use switch off the drill, remove the plug from the power supply and **DO NOT** leave until the chuck has come to a complete stop.

2. INTRODUCTION

Variable speed model allows stepless control of drilling speed between minimum and maximum enabling finer control of finish and tolerance. The belt transmission uses two spring tensioned cone pulleys, the diameters of which can be adjusted by moving a centre idle pulley with the speed adjustment control lever. Safety devices fitted include a no-volt release switch, allowing insurance company approval for use in educational establishments. Supplied with chuck guard. Mortise attachment available, order Model No. MA10.

3. SPECIFICATIONS

| | |
|--|-------------------|
| Model No: | GDM200F/VS |
| Drilling Capacity (Chuck Size): | 16mm |
| Spindle Nose Taper: | MT2 |
| Spindle Centre to Column: | 178mm |
| Spindle Travel: | 80mm |
| Number of Speeds: | Variable |
| Speed Range: | 120-3000rpm |
| Maximum Distance Spindle to Table: | 730mm |
| Maximum Distance Spindle to Base: | 1170mm |
| Working Table Surface Size: | Ø310mm |
| Working Base Surface Size: | 200 x 220mm |
| Overall Base Size: | 460 x 275mm |
| Column Diameter: | 80mm |
| Collar Diameter: | 60mm |
| Overall Height: | 1630mm |
| Motor Power (Start): | 450W(650W) |
| Supply: | 230V |
| Swing: | 356mm |
| Optional Keyless Chuck 16mm: | GDMX/KC |

4. CONTENTS

4.1. PACKAGE CONTENT

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

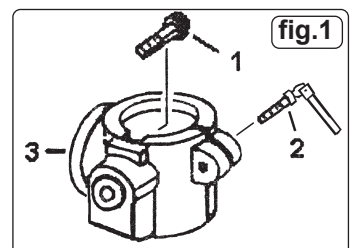
| | | |
|------------------------|---|---------------------------------|
| Head Assembly | Feed Handles and Knobs (3) | Speed Control Handle |
| Column with Flange | Pivoted Lock Handle (2 - table arm & bracket) | Safety Guard |
| Base | Adjusting Handle with Set Screw (table) | Set Screws (2 - head)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

5. ASSEMBLY

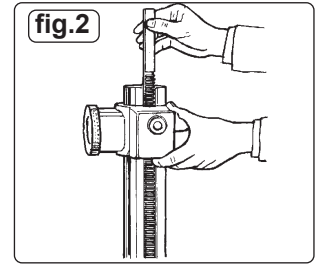
Note: Figures are illustrative and may differ in detail from your drill.

5.1. ASSEMBLY

- 5.1.1. Place the column assembly on the base, align holes and secure with the four bolts provided.
- 5.1.2. 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.
- 5.1.3. Screw the lock handle (fig.1.2) into the lugs at the rear of the table bracket but **DO NOT** tighten.
- 5.1.4. Install the table bracket onto the column together with the rack (fig.2), engaging gear in bracket with rack teeth. Note that the rack should be assembled with the longer tooth-free end uppermost.
- 5.1.5. Install the rack collar and tighten grub screw firmly (fig.3). Ensure that rack is free to move around column.
- 5.1.6. Install the table adjusting handle (fig.3.A) onto the worm gear shaft, tightening the grub screw onto the flat on the shaft.
- 5.1.7. Tighten the table bracket lock handle (fig.3.B).
- 5.1.8. Fit the table arm to the table bracket with the bolt and washer provided (fig.2.D).
- 5.1.9. Fit the table to the table arm and clamp in position with the smaller lock handle.

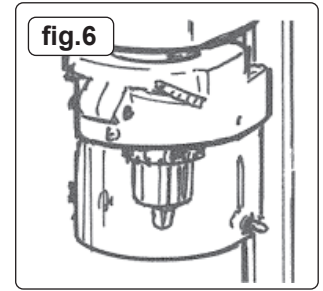
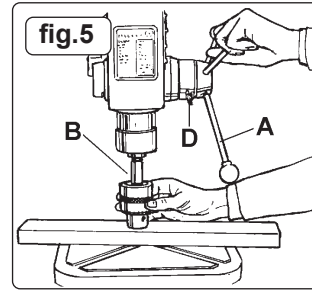
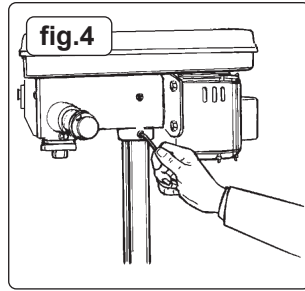
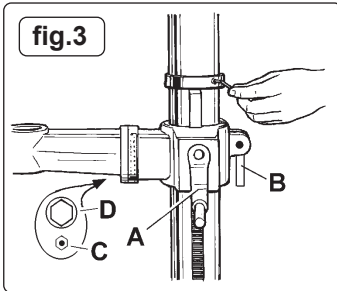


- 5.1.9. Carefully place the head assembly over the column and slide it into position. Align head with base.
- 5.1.10. Fit the two set screws in the side of the head to lock it into position and tighten with hex. key (fig.4).
- 5.1.11. Screw the three feed handles and knobs to the hub of the pinion shaft (fig.5.A).
- 5.1.12. Open the pulley cover and then insert the speed control handle through the side of the pulley housing.
- 5.1.13. Screw the handle into the central pulley carrier with the flats on the outer sleeve of the handle engaged in the guide slot.
- 5.1.14. 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).
- 5.1.15. 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.
- 5.1.16. 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.
- 5.1.17. 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 (see fig.6).



5.2. DRILL MOUNTING

- 5.2.1. For stability and safety it is important that the drill base is securely bolted to the floor.
- 5.2.2. Ensure that the mounting surface is capable of supporting the drill together with the weight of the heaviest likely workpiece.



6. OPERATION

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

6.1. INSTALLING DRILL BIT

- 6.1.1. Insert drill bit into chuck jaws to 1" (25mm) deep (avoid inserting small bits too far) and centre bit in chuck before tightening.

6.2. ADJUSTING THE TABLE

- 6.2.1. 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.
- 6.2.2. 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.
- 6.2.3. To turn the table around the column, loosen the lock handle. Turn the table to the desired position and then tighten the lock handle.

6.3. ADJUSTING THE SPEED

- 6.3.1. 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.

6.4. POSITIONING THE WORKPIECE

- 6.4.1. 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.
- 6.4.2. For small workpieces that cannot be clamped to the table, use a drill vice (not included). Vice must be clamped or bolted to table.

6.5. Use the scale on the side of the drill head near the drill handle.


- 6.5.1. Loosen locking screw (fig.5.D) and set the scale to the depth required. Tighten locking screw.
- 6.5.2. When ready to drill, simply pull the feed handle. The drill will stop at the set depth.

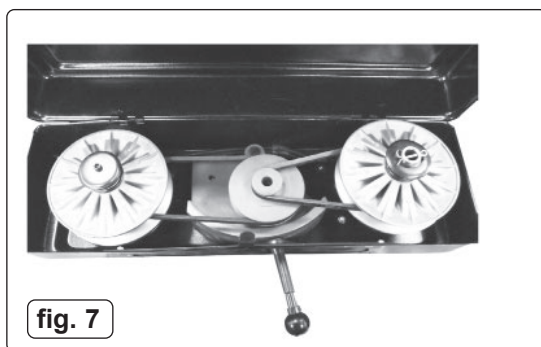
7. DRILL SPEEDS

The chart below shows recommended drill speeds for various bit diameters and materials. Select the available drill speed that is the same as, or nearest to, the one recommended for the task in hand.

| Drill Dia. (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 | 280 | 280 | 970 |
| 25 | 120 | 210 | 210 | 830 |

8. MAINTENANCE

- ❑ **WARNING!** Disconnect from mains supply before performing any maintenance.
- 8.1. Clean the tool after each use. A coat of automobile-type wax applied to the table and column will help to keep the surfaces clean.
- 8.2. Blow out any dust that may have accumulated in the motor.
- 8.3. Periodically lubricate the table elevation rack/gear/worm mechanism and the spindle sleeve exterior with machine oil.
- 8.4. **BELT CHANGING** Please note that an instructional video for this product is available to view on our YouTube channel. 
- 8.4.1. Remove the securing screw and open the belt cover (fig.7).
- 8.4.2. Move the speed change lever to the right, to release the tension on the top belt.
- 8.4.3. Remove the belt and, if necessary, move the speed change lever to the left in order to remove the lower belt.
- 8.4.4. Fit replacement belts in the opposite manner to the above.
- 8.4.5. Close the lid and secure with the screw.
- 8.4.6. Run the drill to re-tension the belts.



9. TROUBLESHOOTING

| PROBLEM | POSSIBLE CAUSE | SOLUTION |
|------------------------------|-------------------------------------|---|
| Excessive noise | 1) Spindle is dry | 1) Disassemble spindle/drill and lubricate |
| | 2) Pulley is loose | 2) Tighten pulley |
| | 3) Bearing damaged | 3) Replace the bearing |
| Excessive drill wobble | 1) Chuck is loose | 1) Tighten chuck by pressing it against the table (see 5.1.10 - 5.1.12) |
| | 2) Bearing or spindle shaft is worn | 2) Replace worn part |
| | 3) Chuck is worn | 3) Replace the chuck |
| Drill binds in the workpiece | 1) Feed pressure is wrong | 1) Apply less pressure |
| | 2) Drill is loose | 2) Tighten the drill chuck with key |
| | 3) Speed is too fast | 3) Change to a lower speed |
| Drill burns or smokes | 1) Speed is too fast | 1) Change to a lower speed |
| | 2) Chips are not discharging | 2) Clean the drill |
| | 3) Drill bit is dull | 3) Use a new drill bit |
| | 4) Workpiece requires lubrication | 4) Lubricate whilst drilling |
| | 5) Feed pressure is too high | 5) Apply less pressure |
| Table is difficult to raise | 1) Lubrication is required | 1) Lubricate with light oil |
| | 2) Rack is bent | 2) Straighten the rack |

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.

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.

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