



INSTRUCTIONS FOR

10-SPEED FLOOR STANDING WOOD LATHE

MODEL NO: **SM1100.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 safety footwear



Wear a mask



Wear protective clothing



Wear ear protection

1. SAFETY

1.1. ELECTRICAL SAFETY

- ❑ **WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:
You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a Residual Current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician. You may obtain a Residual Current Device by contacting your Sealey stockist.

You must also read and understand the following instructions concerning electrical safety.

The Electricity at Work Act 1989 requires that all portable electrical appliances, if used on business premises, are tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.

The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. If in any doubt about electrical safety, contact a qualified electrician.

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. Ensure that cables are always protected against short circuit and overload.

1.1.3. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that none is loose.

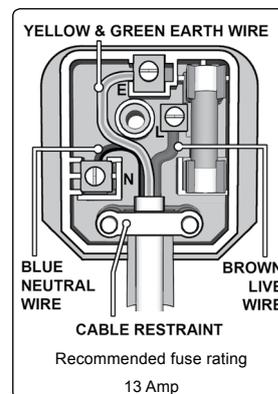
1.1.4. Ensure that the voltage marked on the appliance matches the power supply to be used and that the plug is fitted with the correct fuse - see plug diagram on right.

- ✗ **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. Immediately have any faulty item repaired or replaced by a qualified electrician. When a BS 1363/A UK 3 pin plug is damaged, cut the cable just above the plug and dispose of the plug safely. Fit a new plug according to the following instructions (UK only).
 - 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.

- ✓ Familiarise yourself with the application, limitations and potential hazards of the lathe.
- ❑ **WARNING!** Disconnect the lathe from the mains power before changing accessories, servicing or performing any maintenance.
- ✓ Maintain the lathe in good condition (use an authorised service agent to service and maintain the motor).
- ✓ Replace or repair damaged parts. *Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*
- ❑ **WARNING!** Keep all guards and holding screws in place, tight and in good working order. Check regularly for damaged parts.
- ✓ Locate lathe in a suitable work area. Keep area clean and tidy, free from unrelated materials and ensure that there is adequate lighting.
- ✓ Keep the lathe clean for best and safest performance and check moving parts alignment regularly.
- ✓ Keep turning tools clean and sharp for best and safest performance.
- ✓ Ensure that there are no flammable or combustible materials near the work area.
- ❑ **WARNING!** Always wear approved eye or face protection when operating the lathe (standard spectacles are not adequate). Wear approved ear defenders and use a face or dust mask if dust is generated.
- ✓ Keep hands and body clear when operating the lathe. **DO NOT** reach across the lathe.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain and/or tie back long hair.
- ✓ Keep children and unauthorised persons away from the work area.
- ✓ Remove all wrenches, hex keys etc. from the lathe and its vicinity before turning it on.
- ✓ Avoid unintentional starting and ensure the lathe power switch is "OFF" before plugging into the mains power supply.
- ✗ **DO NOT** use the lathe for a task that it is not designed to perform.
- ✗ **DO NOT** operate the lathe if any parts are damaged or missing, as this may cause failure and/or personal injury.
- ✗ **WARNING! DO NOT** use the lathe to cut any materials other than wood.
- ✗ **DO NOT** stand or climb on the lathe.
- ✗ **DO NOT** get the lathe wet or use in damp or wet locations or areas where there is condensation.



- ✗ **DO NOT** use any tools other than those appropriate to wood turning.
- ✗ **DO NOT** pull the plug from the power socket by the cable.
- ✓ When not in use switch off the lathe and remove the plug from the power socket.
- ✗ **DO NOT** operate the lathe when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✗ **DO NOT** leave the lathe operating unattended and **DO NOT** leave the work area until the lathe is at a complete stand still.

1.2. WOOD CUTTING SAFETY

- ✓ Remove all loose wood knots before mounting workpiece on the lathe.
- ✓ Fasten the workpiece securely to the faceplate or between centres before turning on the lathe. Wrong set-up procedures may cause the workpiece to be thrown from the lathe, which may cause personal injury.
- ✓ To confirm that the workpiece will not hit any part of the lathe always rotate it by hand before turning on the motor.
- ✓ Rough out a workpiece to be as true and round as possible before attaching to the faceplate. This will minimise vibration.
- ✓ Rough out “out of round” workpieces at a slow speed. Running the lathe too fast will cause vibration, which may result in the workpiece being thrown from the lathe, or the tool being pulled from your hand.
- ✓ Avoid awkward hand positions, care must be taken to stop your hands from slipping onto the rotating workpiece.
- ✓ Keep a firm control of the cutting tool. Care must be exercised when wood knots or voids are exposed to the turning tool.
- ✓ Complete any hand sanding before removing the workpiece from the lathe. Ensure that the lathe speed does not exceed that used for the last cutting operation performed on that same workpiece.
- ✗ **DO NOT** store, or lay, work tools in such a way that you must reach over the lathe, or the workpiece, to select them. Hang or store the turning tools at the tail stock end of the lathe.
- ✗ **DO NOT** allow the tool to “bite” into the workpiece as the wood may split, or be thrown from the lathe.
- ✓ For spindle turning, always position the tool rest above the centre line of the lathe. **DO NOT** apply the turning tool to the workpiece below the level of the rest itself.
- ✗ **DO NOT** run the lathe in the wrong direction. This could cause the turning tool to be thrown from your hands. The workpiece surface must be moving downwards past the tool rest.
- ☐ **WARNING! DO NOT** remount a workpiece if the original centres of the workpiece have been altered or removed.
- ✓ Having remounted a workpiece where **NO** alteration has been made to the original centres, the lathe must be set to the lowest speed before turning it on.
- ✗ **DO NOT** mount a workpiece that contains splits, checks or loose knots.
- ✗ **DO NOT** switch on the lathe whilst the tool is in contact with the workpiece.
- ☐ **WARNING!** Keep alert. **DO NOT** allow familiarity (from frequent use) to cause a mistake. Remember, a careless second is sufficient to inflict serious damage and/or personal injury.

2. INTRODUCTION

Powered by smooth operating 550W induction motor. Plate clutch allows seamless speed control without the need to stop the motor and adjust belts and pulleys. Hollow centred head and tail stocks allow hole boring. One-piece machined lathe bed and head stock extension for bowl turning and sanding operations. Head stock rotates through five pre-set positions for outboard bowl turning. Includes floor stand and fitted with a 3-pin plug and cable.

3. SPECIFICATION

Model no:SM1100.V2
 Turning capacity - over bed: 370mm
 Turning capacity - over tool rest: 270mm
 Thread size: 3/4" x 16tpi
 Distance between centres: 1100mm
 Tailstock taper: MT2
 Turning speeds: 500-2000rpm

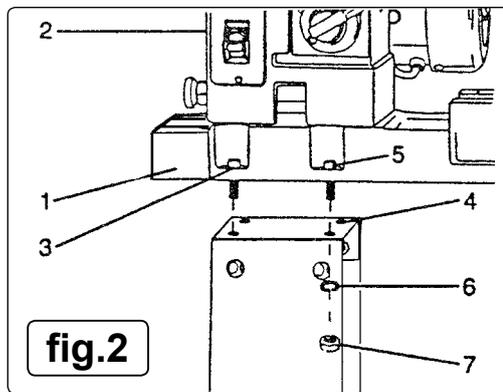
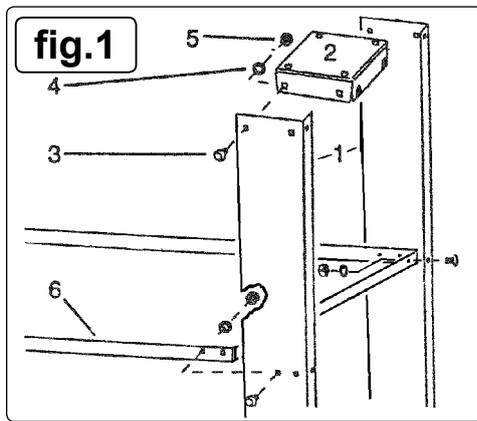
4. CONTENTS

- 4.1. Unpack the lathe and check contents against the list below. Should there be any damaged or missing parts do not attempt to assemble the lathe but contact your supplier immediately.

Lathe Assembly	Top Plates x 2	Hex Bolts x 8	Push Rod
Tailstock Cup Centre	Legs 2 + 2	Lock Washers x 8	Hex Keys x 4
Headstock Spur Centre	Tool Tray	Flat Washers x 20	Face Plate
Spanners x 2	Nuts x 28	Carriage Bolts x 20	

5. ASSEMBLY

- 5.1. **STAND ASSEMBLY** (fig. 1)
Note: During initial assembly do not fully tighten nuts/bolts.
- 5.1.1. Attach one front and one rear leg (1) to the outside edges of a top plate (2) using carriage bolts (3), washers (4) and nuts (5). Repeat for the second top plate and the remaining two legs.
- 5.1.2. Fit the tool tray (6), flange up, between the two pairs of legs with bolts, washers and nuts as above.
- 5.1.3. Place the stand upright on a level, even surface and tighten all fixings.
- 5.2. **MOUNTING** (fig. 2)
 ☐ **WARNING!** The lathe assembly is heavy and will require at least two people to lift it.
- 5.2.1. Place the lathe bed (1) onto the stand with the headstock (2) over the top plate and the holes in the bed aligned with the holes in the top plate.
 Insert the four bolts (5) and loosely fit the washers (6) and nuts (7).
- 5.2.2. Align the holes in the tailstock end of the lathe bed with those in the other top plate (4) and fit bolts, washers and nuts as above.
- 5.2.3. Tighten all eight nuts.
Important! When the lathe has been finally positioned in the work area **the stand must be bolted to the floor to ensure stability.**



5.3. **CENTRES** (fig.3)

5.3.1. Unscrew the face plate (1) from the headstock spindle using the two spanners (2) provided.

5.3.2. Insert the headstock centre (3) into the spindle bore and tap gently into place with a soft hammer or wooden block.

5.3.3. Similarly fit the tailstock centre (4) into the tailstock bore.

5.3.4. To remove either centre insert the push-out rod (5) into the bore (6) at the rear of the headstock or tailstock, as appropriate. If necessary, gently tap the end of the rod with a soft hammer.

5.4. **HEADSTOCK** (fig.4)

5.4.1. The headstock may be rotated into any of five preset positions - 0° for spindle or face plate turning and 60, 90, 120 and 180° for face plate turning.

5.4.2. Loosen the head lock by turning the head lock handle (1) through 180°.

5.4.3. From the 0° position, pull out the headstock release knob (2) and rotate the headstock clockwise to the required position.

5.4.4. Ensure that the spring loaded release knob has clicked into the locked position.

5.4.5. Reclamp the headstock by turning the head lock handle through 180°.

☐ **WARNING! DO NOT turn the headstock by more than 180° from the spindle turning position or wiring damage may occur. See fig. 5.**

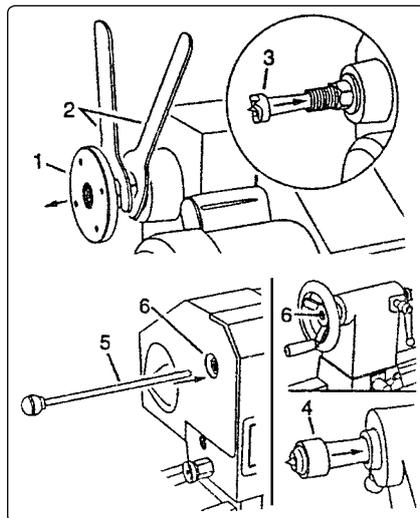


fig.3

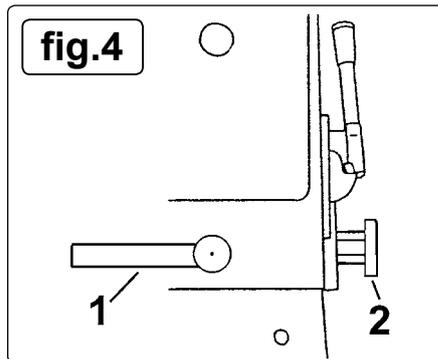
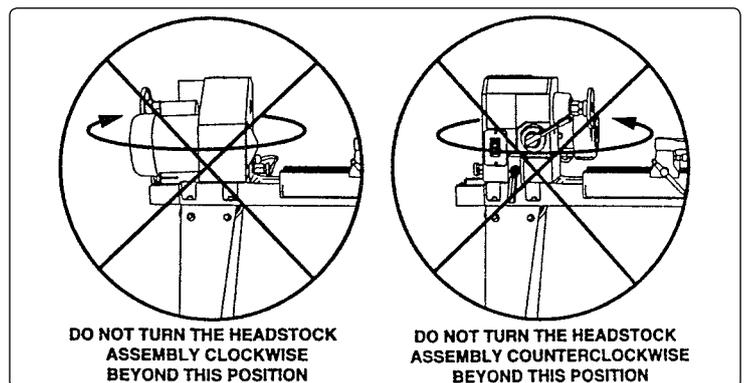


fig.4

fig.5



5.5. **TAILSTOCK** (fig.6)

5.5.1. The tailstock may be moved along the lathe bed and the tailstock spindle adjusted by up to 2.5" (63mm) to suit the workpiece length.

5.5.2. Loosen the locking lever (2), reposition the tailstock (1) along the lathe bed and retighten the locking lever.

5.5.3. To move the tailstock spindle (3) loosen the spindle locking lever (4) and then turn the hand wheel (5) as necessary. Retighten the locking lever.

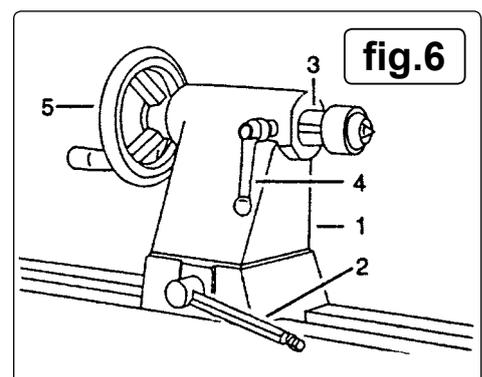


fig.6

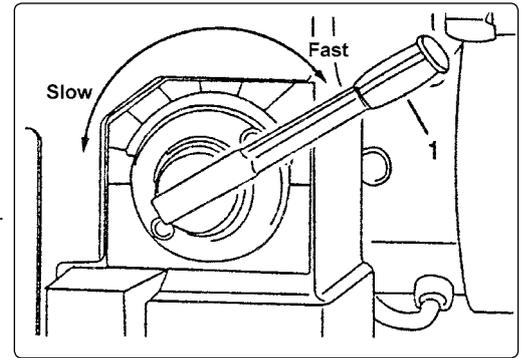
5.6. **SPEED CONTROL** (fig.7)

Important! The motor must be running when the speed control lever is moved.

5.6.1. To change speed, pull back on the lever (1) and rotate it to the required setting.

Note that at each speed setting the lever, when released, will spring forward into the locked position.

5.6.2. Before switching off the motor always select the slowest speed setting (lever fully anticlockwise) to ensure that the motor will restart easily.



6. ON/OFF SWITCH

Note: The lathe is fitted with a no-volt On/Off switch which automatically switches off if the supply is interrupted (power cut, socket switched off etc.) thereby preventing unexpected, and therefore dangerous, start-up when the supply is reconnected.

6.1. To switch the lathe on open the switch cover and press the "I" button. Allow the cover to close but do not press fully shut and latched as this will switch off the lathe.

6.2. To switch the lathe off normally open the switch cover and press the "O" button.

In an emergency push the red 'button' on the switch cover. This will stop the lathe and also latch the switch cover closed, with the "O" button depressed. The lathe cannot be restarted until the switch cover has been unlatched by sliding the red button upwards.

fig.7

7. OPERATION

WARNING! Ensure you read, understand and apply the safety instructions before using the lathe. If you have NO turning experience, we recommend you practice until you have familiarised yourself with the applications and limitations of the lathe and the hazards of turning.

DO NOT TAKE ANY CHANCES WHEN WORKING WITH A LATHE AND TURNING TOOLS. Keep alert. DO NOT allow familiarity (from frequent use) to cause a careless mistake. Remember, failure to operate the lathe correctly is dangerous and may cause serious damage and/or personal injury.

7.1. Fasten the workpiece securely to the faceplate or between centres. When screwing a workpiece to the faceplate use brass wood screws and check that the points of the screws will not foul the tool during turning.

7.2. Adjust the tool rest to suit, ensuring that it is close to the workpiece and, for spindle turning, positioned above the centre line of the workpiece.

7.3. To confirm that the workpiece will not hit any part of the lathe always rotate it by hand before turning on the motor.

7.4. Check that all clamps and locks are tightened before switching on the lathe.

7.5. Rough out "out-of-round" workpieces at a slow speed. Running the lathe too fast will cause vibration, which may result in the workpiece being thrown from the lathe, or the tool being pulled from your hand.

7.6. Keep a firm control of the cutting tool. Care must be exercised when wood knots or voids in the workpiece are exposed.

7.7. Complete any hand sanding before removing the workpiece from the lathe. Ensure that the lathe speed during sanding does not exceed the last cutting speed used.

8. MAINTENANCE

WARNING! Ensure the lathe is unplugged from the mains power supply before service or maintenance.

8.1. Keep the lathe clean and the surrounding area tidy.

8.2. Frequently blow out any dust accumulation in the motor, housing and bed. **Wear eye protection and a mask when doing so.**

8.3. Protect the bed from corrosion by occasionally applying automobile wax.

8.4. Regularly lightly oil control and clamp levers and threads to ensure smooth operation.

8.5. Should the motor require service or maintenance contact your local authorised service agent.

9. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Motor will not run.	Defective on/off switch or defective switch cable. Motor burnt out.	Replace defective parts. DO NOT attempt to repair. Contact your local authorised service agent.
Lathe slows down when turning.	Tools blunt. Cuts too deep.	Sharpen tools. Reduce cut.
Headstock or tailstock loose on bed.	Insufficient clamping.	Tighten large nut beneath head/tailstock to increase clamping (adjust nut with clamping lever 'Off')
Workpiece chars at tailstock end	Cup centre too tight or not lubricated	Back off tailstock spindle and lubricate cup centre.



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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