

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.

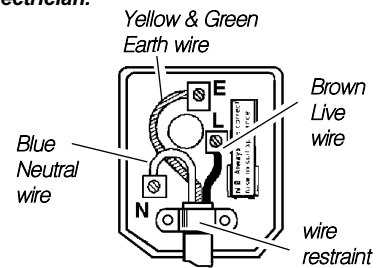
**IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE OR PERSONAL INJURY, AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

## 1. SAFETY INSTRUCTIONS

### 1.1. ELECTRICAL SAFETY. **WARNING!** It is the user's responsibility to read, understand and comply with the following:

You must check all electrical equipment and appliances to ensure they are safe before using. You must inspect power supply leads, plugs and all electrical connections for wear and damage. You must ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Breaker) should be incorporated in the main distribution board. We also recommend that an RCD (Residual Current Device) is used with all electrical products. It is particularly important to use an RCD together with portable products that are plugged into an electrical supply not protected by an RCCB. If in doubt consult a professional electrician. You may obtain a Residual Current Device by contacting your Sealey dealer. **You must** also read and understand the following instructions concerning electrical safety.

- 1.1.1. The **Electricity At Work Act 1989** requires all portable electrical appliances, if used on a business premises, to be tested by a qualified Electrician at least once a year by using a Portable Appliance Tester (PAT).
- 1.1.2. The **Health & Safety at Work Act 1974** makes owners of electrical appliances responsible for the safe condition of the appliance, and the safety of the appliance operator. **If in doubt about electrical safety, contact a qualified electrician.**
- 1.1.3. Ensure the insulation on all cables and the product itself is safe before connecting to the mains power supply. See 1.1.1. & 1.1.2. above and use a Portable Appliance Tester (PAT).
- 1.1.4. Ensure that cables are always protected against short circuit and overload.
- 1.1.5. Regularly inspect power supply, leads, plugs and all electrical connections for wear and damage, especially power connections, to ensure that none are loose.
- 1.1.6. **Important:** Ensure the voltage marked on the product is the same as the electrical power supply to be used, and check that plugs are fitted with the correct capacity fuse. A 13Amp plug may require a fuse smaller than 13Amps for certain products (*subject to 1.1.10. below*) see fuse rating at right.
- 1.1.7. DO NOT pull or carry the powered appliance by its power supply lead.
- 1.1.8. DO NOT pull power plugs from sockets by the power cable.
- 1.1.9. DO NOT use worn or damaged leads, plugs or connections. Immediately replace or have repaired by a qualified Electrician. A U.K. 3 pin plug with ASTA/BS approval is fitted. In case of damage, cut off and fit a new plug according to the following instructions (discard old plug safely).




**FUSE RATING**  
 THIS PRODUCT MUST BE FITTED  
 WITH A:  
**13 Amp FUSE**

(UK only - see diagram at right). **Ensure the unit is correctly earthed via a three-pin plug.**

- a) **Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.**
- b) **Connect the BROWN live wire to live terminal 'L'.**
- c) **Connect the BLUE neutral wire to the neutral terminal 'N'.**

**After wiring, check there are no bare wires, that all wires have been correctly connected and that the wire restraint is tight.**

Double insulated products are often fitted with live (BROWN) and neutral (BLUE) wires only. Double insulated products are always marked with this symbol . **To re-wire, connect the brown & blue wires as indicated above. DO NOT connect the brown or blue to the earth terminal.**

- 1.1.10. Some products require more than a 13Amp electrical supply. In such a case, **NO** plug will be fitted. **You must** contact a qualified Electrician to ensure a 30 amp fused supply is available. We recommend you discuss the installation of a industrial round pin plug & socket with your electrician.
- 1.1.11. **Cable extension reels.** When a cable extension reel is used it should be fully unwound before connection. A cable reel with an RCD fitted is recommended since any product which is plugged into the cable reel will be protected. The section of the cable on the cable reel is important. We recommend that at least 1.5mm<sup>2</sup> section cable but to be absolutely sure that the capacity of the cable reel is suitable for this product and for others that may be used in the other output sockets, we recommend the use of 2.5mm<sup>2</sup> section cable.

### 1.2 GENERAL MACHINE OPERATING SAFETY

- Familiarise yourself with the application and limitations of the lathe, as well as the specific potential hazards involved.
- **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. Non authorised parts may be dangerous and will invalidate the warranty.*
- **WARNING!** Keep all guards, locks and holding screws in place, tight and in good working order. Check regularly for damaged parts.
- Locate lathe in an adequate working area for its function, keep area clean & tidy, free from unrelated materials and ensure there is adequate lighting.
- Keep the lathe clean for best and safest performance.
- Keep turning tools clean and sharp for best and safest performance.
- Ensure 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, and if possible a dust extraction system.
- Keep hands and body clear when operating the lathe, and 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 working area.
- Remove adjusting keys and wrenches from the machine 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 force the lathe to achieve a task it was not designed to perform.
- ⚠ DO NOT operate the lathe if any parts are damaged or missing as this may cause failure or possible personal injury.
- **WARNING!** DO NOT use the lathe to cut any materials other than wood.
- ⚠ 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 for wood turning.
- ⚠ DO NOT operate the lathe when you are tired, under the influence of alcohol, drugs or intoxicating medication.

- ⊞ DO NOT use the lathe where there are flammable liquids, solids or gases such as paint solvents, etc.
- ⊞ DO NOT leave the lathe operating whilst unattended, and do not leave the work area until the lathe is at a complete stand still.
- ⊞ DO NOT pull the power cord from the power supply.
- ⊞ When not in use set the speed lever to "SLOW", switch the lathe off, remove plug from the power supply.

### 1.3. WOOD CUTTING SAFETY.

- ⊞ Remove all loose wood knots before installing workpiece between centres or on the faceplate.
- ⊞ Fasten the workpiece securely to the "face plate" or secure the workpiece correctly before attempting to turn the lathe on. Wrong set-up procedures may cause work to be thrown from the lathe, which may cause serious personal injury.
- ⊞ Rotate workpiece by hand before turning on the motor. If workpiece strikes the "tool rest" or "tool" it may split and be thrown from the lathe.
- ⊞ Rough out a workpiece to be as true and round as possible before attaching to the "face plate". This will minimise vibration.
- ⊞ Rough out "out of round" workpieces at a slow speed when turning "between centres" or on the "face plate". Running the lathe too fast will result in vibration, which may cause the workpiece to be thrown from the lathe, or the tool to be pulled from your hand.
- ⊞ Avoid awkward hand positions, care must be taken to stop your hands from slipping into the moving 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 tasks before removing "between centres" or "faceplate" mounted work. Ensure the lathe speed does not exceed the speed 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 workpiece to select them. Hang or store your 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 lathe must run in a direction so that the workpiece turns toward yourself.
- ⊞ **WARNING!** DO NOT remount a work piece to the "faceplate" or to the "between centres" if the "centres" of the original workpiece piece "CENTRAL POINT" has been altered or removed.  
To remount a workpiece to the "between centres" where NO alteration has been made to the original workpiece centre point, the lathe must be set to the lowest speed before turning it on.  
When mounting a "between centres" or "spindle turned" work piece to the "faceplate" or, a "faceplate" turning work piece to the "between centres", be sure the lathe is set at the lowest speed before turning it on.
- ⊞ DO NOT Mount a workpiece that contains any splits, checks or loose knots to a "faceplate" or "between centres".
- ⊞ DO NOT switch the lathe on whilst the tool is in contact with the work piece. Ensure direction of work spin is feed into the blade or cutter.
- ⊞ **WARNING!** Keep alert. DO NOT allow familiarity (from frequent use) which may cause a careless mistake. Remember, a careless second is sufficient to inflict serious damage or personal injury.

## 2. SPECIFICATIONS

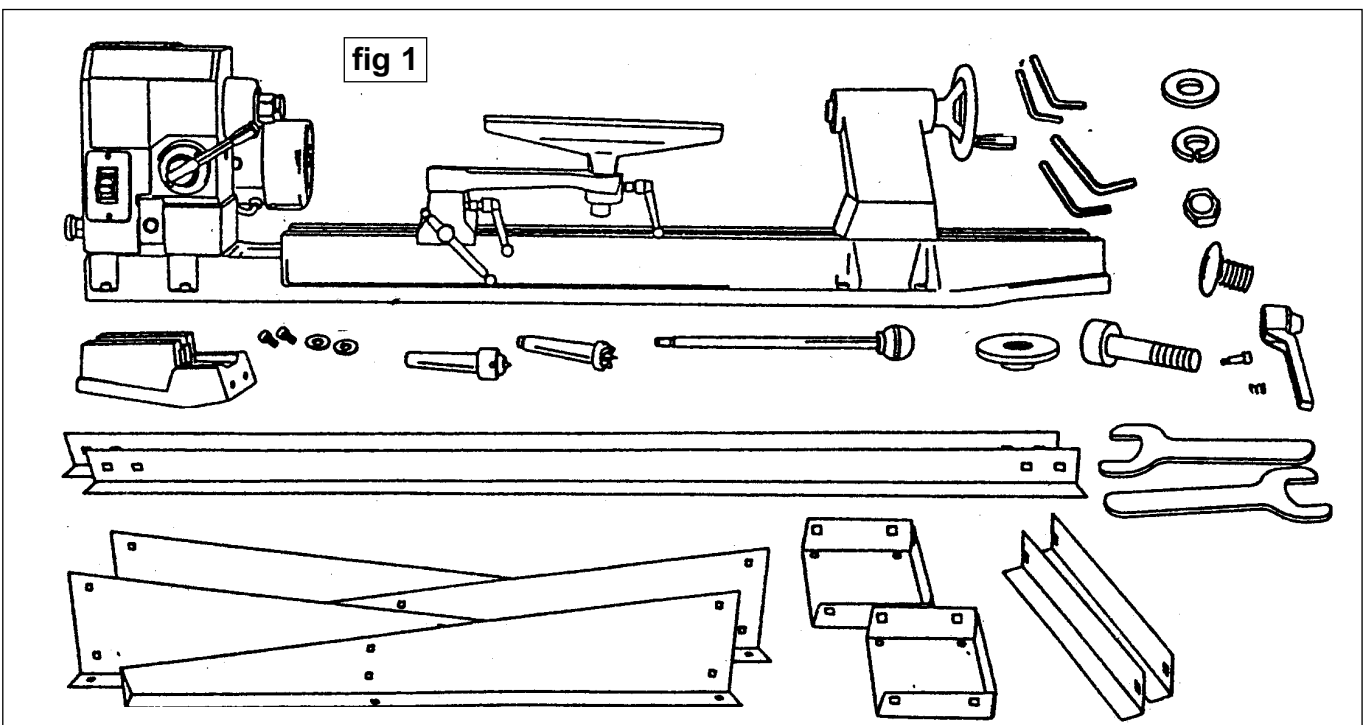
Height of Centre .....155mm  
 Turning Capacity Over Bed .....310mm  
 Thread Size .....3/4" x 16tpi  
 Distance Between Centres .....900mm

Tailstock Taper .....MT No1  
 Turning Speeds (rpm) .....  
 500, 620, 760, 900, 1050, 1210, 1400, 1590, 1790, 2000.  
 Motor .....450W

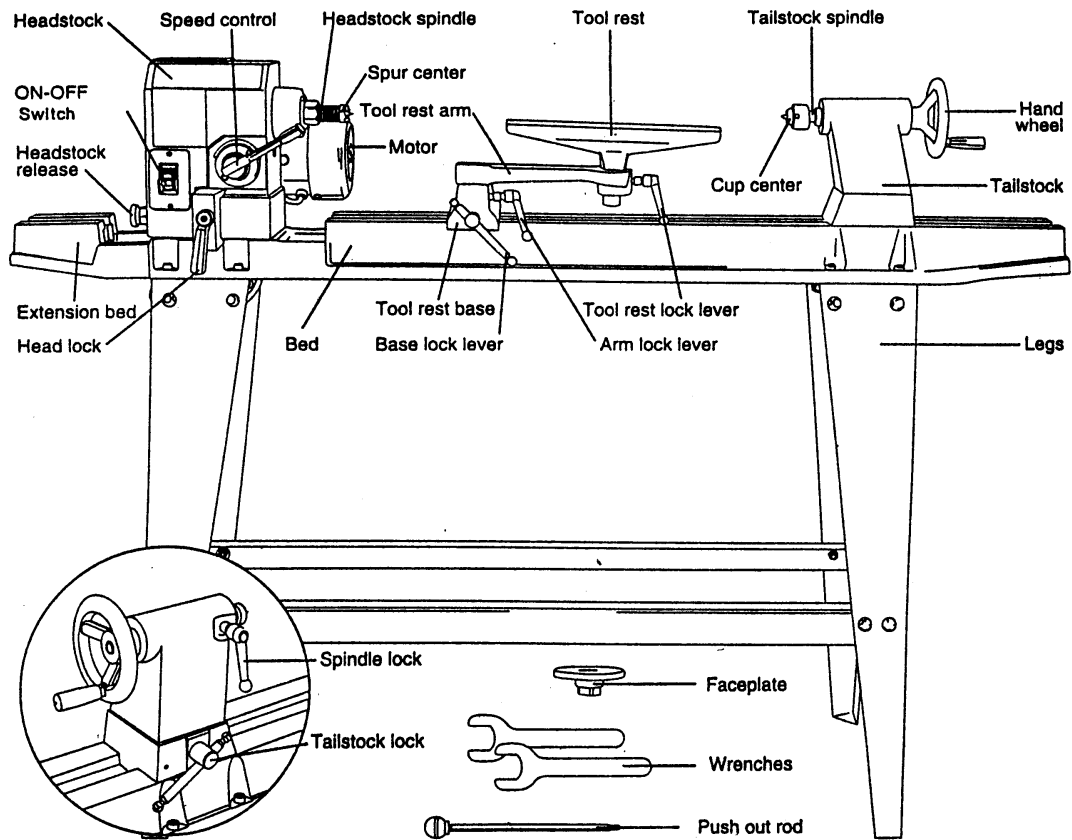
## 3. ASSEMBLY

⊞ **WARNING!** The lathe is very heavy and must only be lifted with assistance. Ensure you have adequate help before attempting to unpack and assemble.

When unpacked, separate the leg set parts from the lathe parts and check contents according to figure1 below. Should there be any damaged or missing parts do not attempt to assemble the lathe but contact your supplier immediately.



## LATHE SET UP



**⚠ WARNING! DO NOT OPERATE THE LATHE UNTIL IT IS COMPLETELY ASSEMBLED AND ADJUSTED CORRECTLY.**

### 3.1. LEG ASSEMBLY

- 3.1.1. Attach legs (fig 2.1) to the outside edge of the top plate (2) with bolts, washers and nuts (3,4,5).
- 3.1.2. Assemble the remaining two legs in the same manner.
- 3.1.3. Connect the two long side supports (6) to legs using bolts, washers and nuts.
- 3.1.4. Connect the two short end supports (7) to each set of legs using bolts, washers, and nuts.
- 3.1.5. Carefully place the stand on a level surface in the chosen operating area and tighten all nuts and bolts securely with wrench.

### 3.2. ASSEMBLY OF LATHE TO LEGS

- 3.2.1. Carefully place the lathe bed assembly (fig 3.1) on top of the assembled stand. **⚠ WARNING! Bed assembly is very heavy.**
- 3.2.2. Position the bed on the stand so that the headstock (2) assembly holes (3) are aligned with the leg top plate holes (4) and pass hex bolts (5) through the four mounting holes.
- 3.2.3. Align the tailstock bed assembly holes over the other leg top plate mounting holes and insert bolts. Secure the bed to the stand with washers and nuts accordingly.  
IMPORTANT: Ensure the lathe is correctly attached to the stand and the stand is stable before continuing.

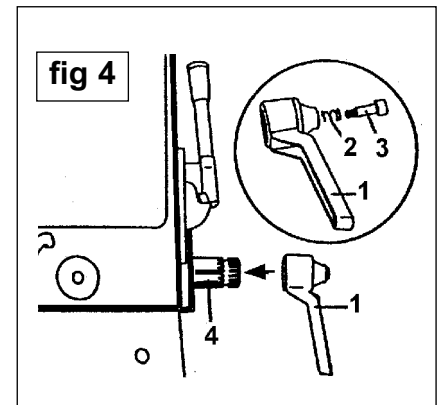
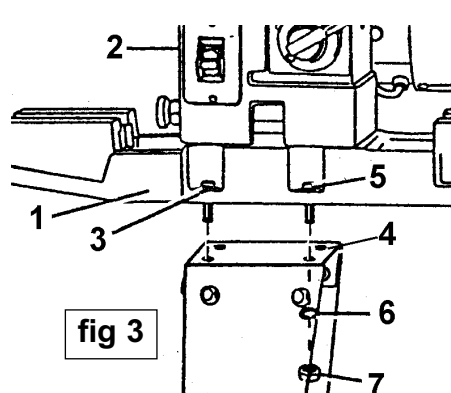
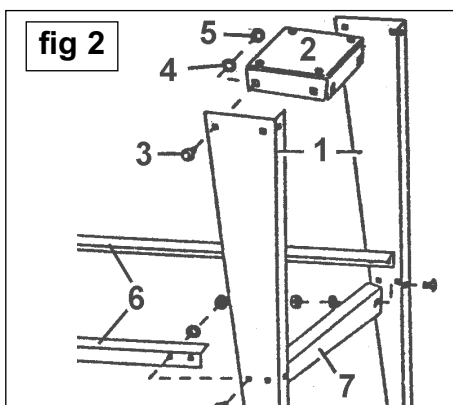
### 3.3. HEAD LOCK LEVER

The headstock is held and locked to the bed head housing by clamps on each side of the head and secured with a centre locking rod.

- 3.3.1. To move the headstock, attach handle (fig 4.1) to locking rod (4) with spring and screw (2 & 3). The handle will enable you to lock and unlock the head on the bed.

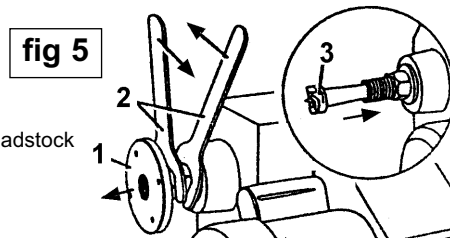
**⚠ WARNING! Only undo the locking handle enough to allow the headstock to swing on the bed. DO NOT undo the lock so that the head is unstable on the bed housing.**

**NOTE:** Locking handles are spring loaded to minimise interference with other lathe parts or the workpiece. Once locked, to move the handle out of the way, pull the handle and turn it to clear any obstacle. Release the handle which will spring back at the chosen position.



### 3.4. THE SPURS (for between centre turning).

- 3.4.1. Remove faceplate (fig 5.1) from the headstock by using the two wrenches (2).
- 3.4.2. Insert the headstock spur (fig 5.3) in the spindle hole.
- 3.4.3. Insert the tailstock centre (fig 6.4) in the tailstock hole.
- 3.4.4. To remove headstock spur, insert push rod (fig 6.5) into hole (6) at the rear of the headstock
- 3.4.5. Remove tailstock by pushing rod (5) through the centre of the tailstock handle (7).



### 3.5. FACEPLATE (Connecting workpiece for faceplate turning).

- 3.5.1. If assembled, remove the headstock spur from the spindle as above.
- 3.5.2. Thread the faceplate onto the headstock spindle.
- 3.5.3. Mount the workpiece to the faceplate with flat head, brass, wood screws. Ensure the length of the screws will not interfere with the cutting tools in use (fig 7. A).

### 3.6. EXTENSION BED (for outboard faceplate turning).

- The extension bed is attached to the rear of the headstock to accommodate the tool rest for outboard faceplate turning (fig 8).
- 3.6.1. If outboard faceplate turning does not require the use of the tool rest, do not attach the extension bed.
- 3.6.2. To attach the extension bed (fig 8.1) to the main bed, align the bolt holes (2) with the threaded bed holes (3). Put the lock washers (4) on the hex bolt (5). Firstly finger tighten, then secure bolts with a hex key.

fig 6

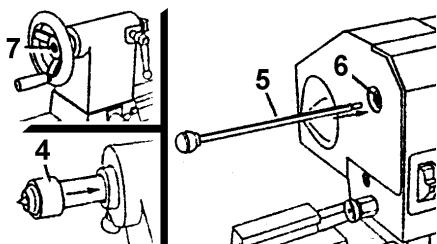


fig 7

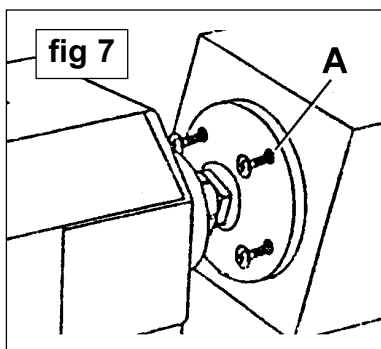
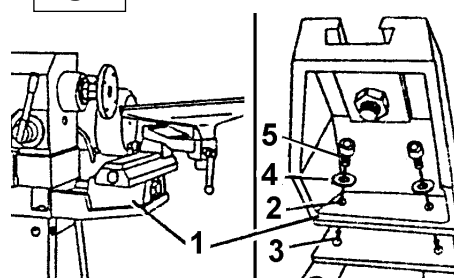


fig 8



## 4. HEADSTOCK ADJUSTMENT

The headstock has five adjustment setting to provide flexibility of lathe use and are as follows:

- 1) 0° when the headstock is aligned with the bed and tailstock for spindle turning.
- 2) Angles of 60°, 90°, and 120° to the bed for use with advanced faceplate turning.
- 3) A 180° turn to face the opposite end of the bed for use with the extension bed and tool rest for outboard turning.

To set the headstock at the required angel proceed as follows:

- 4.1. Loosen the head lock handle (fig 9.& 10.1) by one complete rotation.
- 4.2. Pull out the headstock release knob (2).
- 4.3. Rotate the entire headstock clockwise, let go of the release knob (2). The headstock will automatically fix itself in position when the release knob clicks into one of the five preset position. To change position pull the release knob again, and proceed until you lock the head at the required angle.

#### ❑ WARNING!

1. Only undo the locking handle enough to allow the headstock to turn on the bed. DO NOT undo the lock so that the head is unstable on the bed housing. The headstock is very heavy and may be dangerous if not turned and locked correctly.
2. DO NOT turn headstock assembly more than 180° clockwise or anti-clockwise or the electrical wiring may be damaged (fig 11).

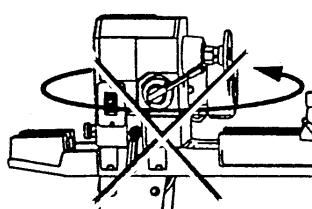
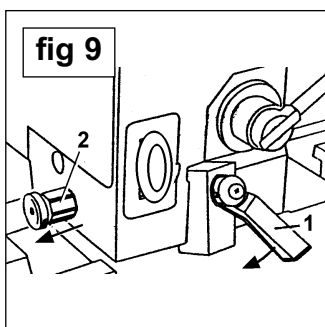
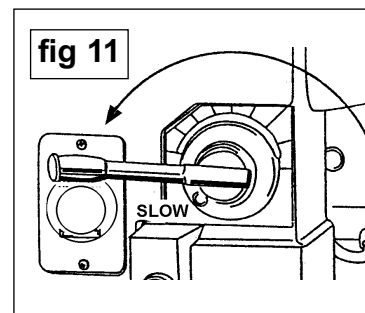
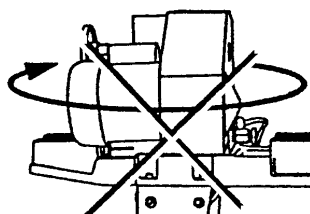


fig 10



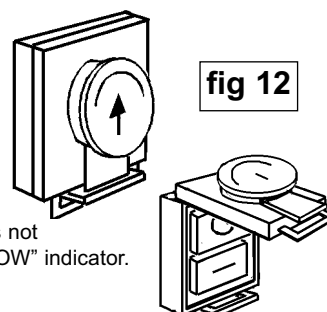
## 5. OPERATING INSTRUCTIONS

❑ **WARNING! DO NOT plug the lathe in to the electrical mains until you are ready for turning. Ensure you read, understand and apply the safety instructions in chapter 1 before use.**

### 5.1. ON/OFF SWITCH

The speed control lever must be set on "SLOW", before turning the lathe on as this will avoid strain on the motor (fig 11). Generally, the speed may only be changed when the lathe is operating. If the speed control is not set to "SLOW", turn the lathe spindle manually, whilst gently moving the speed control lever back to the "SLOW" indicator. To access the ON/OFF switch lift the red tab up and lift the safety cover forward (fig 12).

Turn the lathe ON by depressing the "O" button, turn the lathe OFF by pressing the "I" button.



## 5.2. SPEED CONTROL

The lathe motor must be running in order to change one of the 10 speed settings.

Pull back on the control lever (fig 13. 1) and rotate the handle to the required speed marking (2) and push the lever back so that it locks into place.

## 5.3. TAILSTOCK

Move the tailstock (fig 14.1) by loosening the locking lever (2) and pushing the tailstock to the required position on the bed and lock the lever. The spindle (3) can extend up to 2 1/2" from the tailstock housing. You can move the tailstock spindle (3) by loosening the spindle lock lever (4) and turning the hand wheel (5). Lock levers (4 & 2) before operating the lathe.

The tailstock spindle is hollow and can be accessed from the handwheel end. Use the push rod (fig 6.5) to remove the centre cup or to locate a drill bit through the centre hole.

## 5.4. TOOL REST

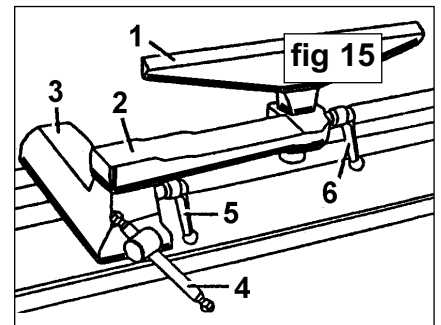
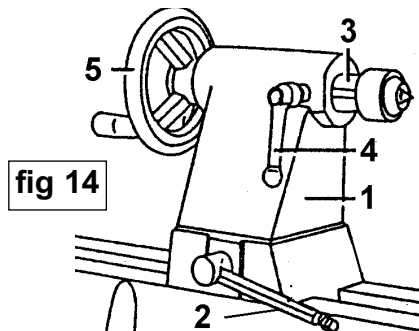
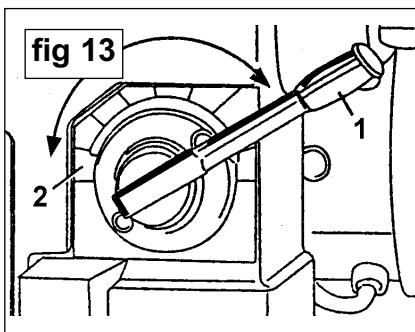
The tool rest (fig 15.1) can be used with or without the arm (2).

To move the tool rest base (3), loosen lock lever (4) and move the base to the right or left and back or front. Tighten lever (4) when the tool rest base is in the correct position.

When using the arm (2) make any necessary adjustments by using locking levers 5 & 6.

**IMPORTANT:** The tool rest should be adjusted to be as close to the workpiece as possible, but, the workpiece must be rotated by hand to ensure there is clearance between it and the rest before turning the lathe on.

The tool rest can also be repositioned on the extension bed at the rear of the Headstock for outboard turning.



## 6. USING THE LATHE

### ⚠ WARNING!

Ensure you read, understand and apply the safety instructions.

Should you have **NO** turning experience, we recommend you practice until you have familiarised yourself with the lathes applications and limitations. At the same time being fully aware of the possible potential hazards peculiar to turning.

**DO NOT TAKE ANY CHANCES WHEN WORKING WITH A LATHE AND ASSOCIATED TOOLS.**

Keep alert. **DO NOT** allow familiarity (from frequent use) as this may cause a careless mistake. Remember, failure to operate the lathe correctly is dangerous and may cause serious damage or personal injury.

## 7. MAINTENANCE

### ⚠ WARNING! Ensure lathe is unplugged from mains power supply before service or maintenance. The headstock is very heavy.

Keep the lathe clean and surrounding area tidy.

Blow dust out from inside the motor housing.

Protect the bed from corrosion, and assist movement of tool rest and tailstock by occasionally applying automobile wax.

Periodic lubrication of the spring levers and other threaded parts will assist operation.

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

### 5-SPEED ROUND BED WOOD LATHE

Model: SM900

73/23/EEC Low Voltage Directive (S.I. 1994/3260)  
89/336/EEC EMC Directive (S.I. 1992/2372 & Amendments)  
98/37/EC Machinery Directive

**Declaration of Conformity** We, the sole importer into the UK, declare that the product listed here is in conformity with the following EEC standards and directives



The construction file for this product is held by the Manufacturer and may be inspected on request by contacting Jack Sealey Ltd

Signed by Mark Sweetman

8th December 1999

For Jack Sealey Ltd. Sole importer into the UK of Sealey Quality Machinery

**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 product. **WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim. **INFORMATION:** Call us for a copy of our latest catalogue on 01284 757525 and leave your full name and address including your postcode.



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