INSTRUCTIONS FOR:

10-SPEED FLAT BED WOOD LATHE

MODEL: **SM900.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. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

1. SAFETY INSTRUCTIONS

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

1.1.1. 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.

1.1.2. 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.**

1.1.3. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply. See 1.1.1. and 1.1.2. and use a Portable Appliance Tester.

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

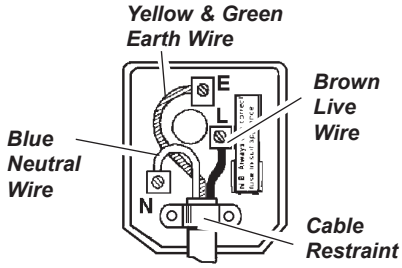
1.1.5. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that none is loose.

1.1.6. **Important:** 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 fuse rating at right.

1.1.7. **DO NOT** pull or carry the appliance by the power cable.

1.1.8. **DO NOT** pull the plug from the socket by the cable.

1.1.9. **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'.
d) After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends beyond the cable restraint and that the restraint is tight.
Double insulated products, which are always marked with this symbol ⧈, are fitted with live (brown) and neutral (blue) wires only. To rewire, connect the wires as indicated above - **DO NOT** connect either wire to the earth terminal.



FUSE RATING
13 AMP

1.1.10. If an extension reel is used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 1.5mm², but to be absolutely sure that the capacity of the reel is suitable for this product and for others which may be used in the other output sockets, we recommend the use of 2.5mm² 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 use the lathe for a task 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 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, or 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 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 faceplate or secure the workpiece correctly between centres before turning 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 faceplate. This will minimise vibration.
✓ Rough out “out of round” workpieces at a slow speed when turning between centres or on the faceplate. 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 workpiece to the faceplate or between centres if the original centre point has been altered or removed.
Having remounted a workpiece 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” workpiece to the faceplate or, a “faceplate” turned workpiece to “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 workpiece. Ensure direction of rotation is correct - workpiece moving down in front of the cutting tool.
❒ **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 and/or personal injury.

2. SPECIFICATIONS

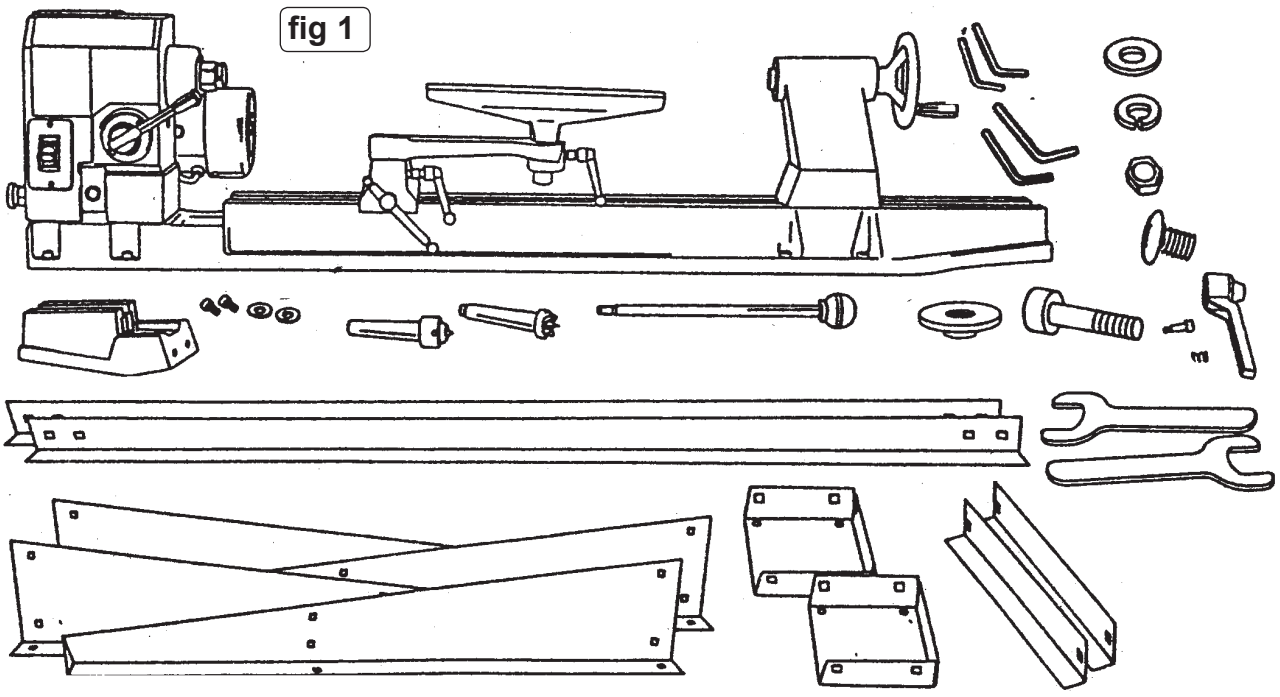
Turning Capacity Over Bed 310mm
Thread Size . . . . . 3/4” x 16tpi
Distance Between Centres. 900mm
Tailstock Taper . . . . . .MT No1

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

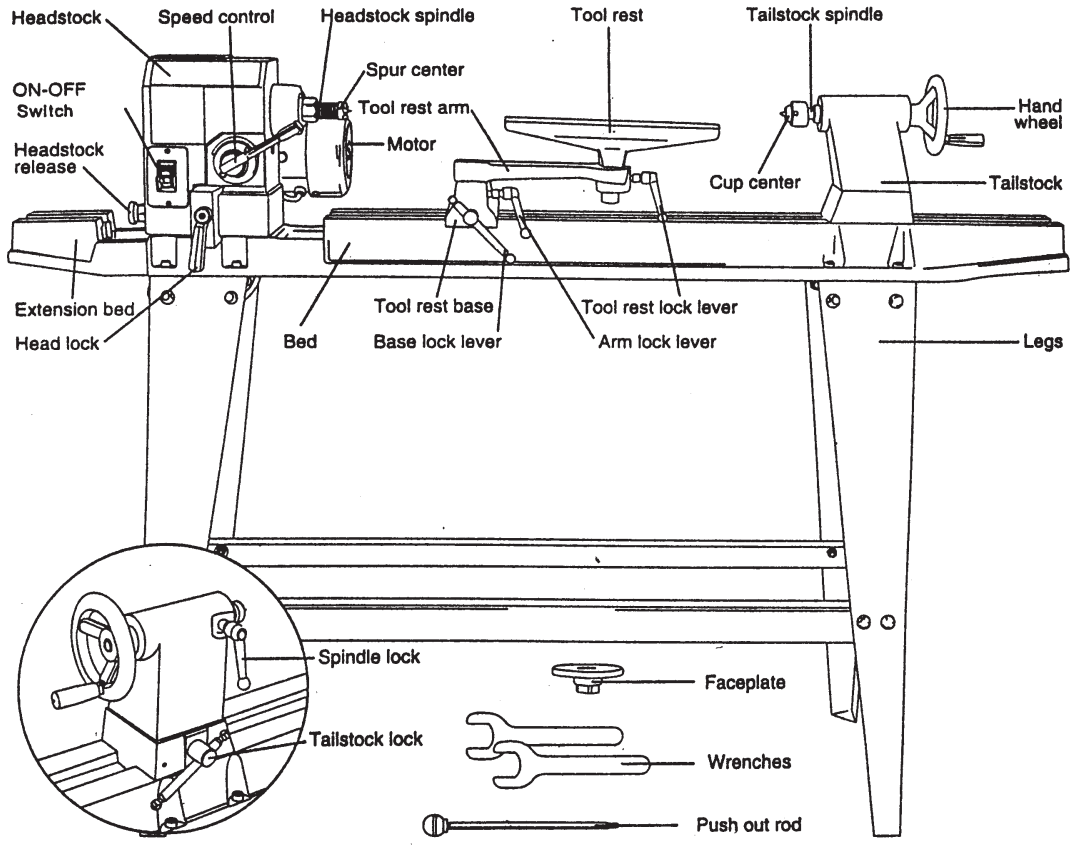
3. ASSEMBLY

❒ **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 assembly the lathe but contact your supplier immediately.

fig 1



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. Assembly 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.

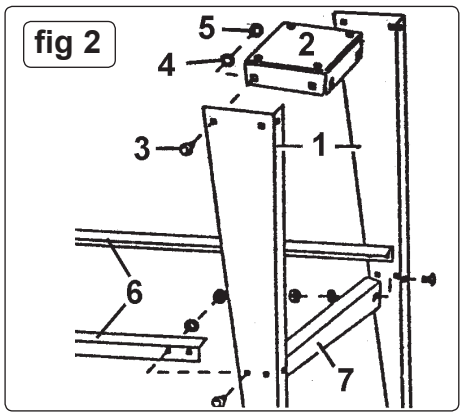
3.2. ASSEMBLY OF LATHE TO LEGS

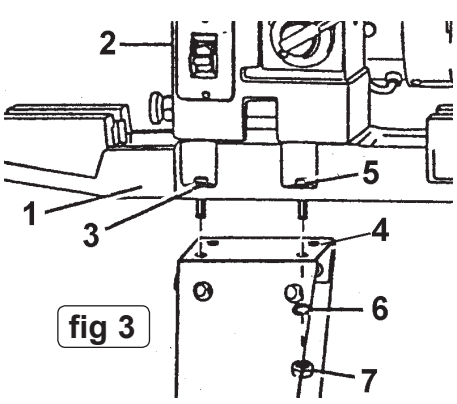
3.2.1. Carefully place the lathe bed assembly (fig 3.1) on top of the assembled stand. ❒ **WARNING! Bed assembly is very heavy.**
3.2.2. Position the bed on the stand so that the headstock (2) assembly holes (3) are aligned with the leg top plate holes (4) and pass hex bolts (5) through the four mounting 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.

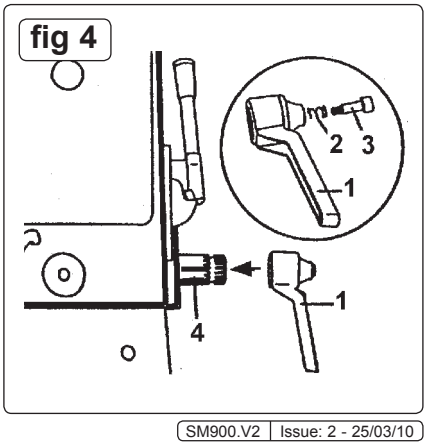
3.3. HEAD LOCK LEVER

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. HEADSTOCK SPUR (for between centre turning).

3.4.1. Remove faceplate (fig 5.1) from the headstock by using the two wrenches (2).

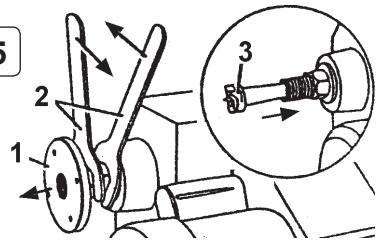
3.4.2. Insert the headstock spur (fig 5. 3) in the spindle hole.

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).

fig 5



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 (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

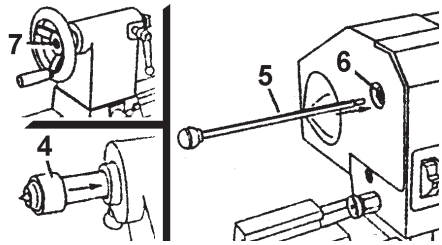


fig 7

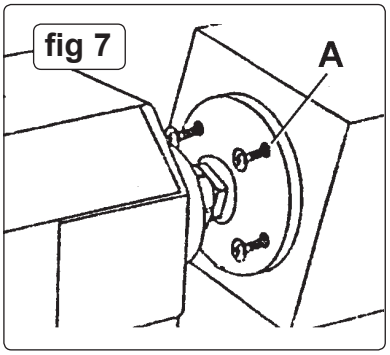
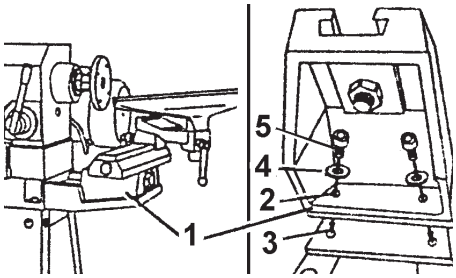


fig 8



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 advanced faceplate turning.
3) A 180° turn for use with the extension bed and tool rest for outboard turning.

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

4.1. Loosen the head lock handle (fig 9.& 10.1) by one complete rotation.

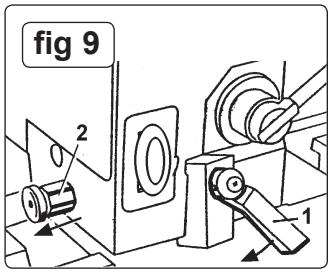
4.2. Pull out the headstock release knob (2).

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 positions. 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 9



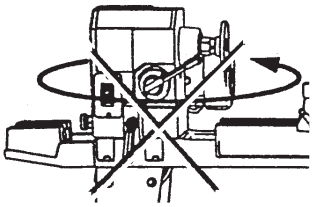


fig 10

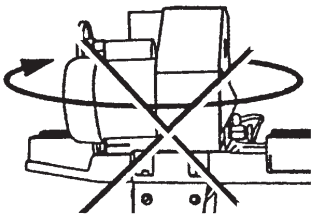
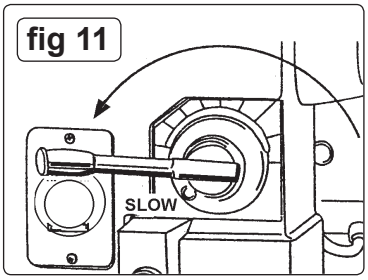


fig 11



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.

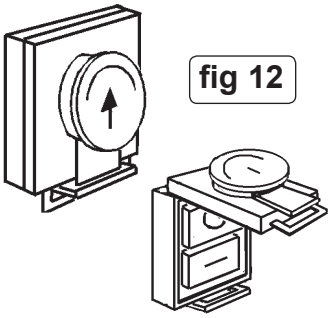
5.1. ON/OFF SWITCH

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.

fig 12



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.

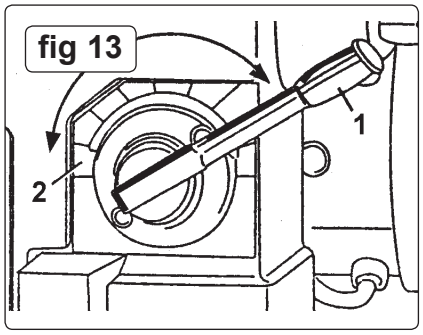
5.3. TAILSTOCK

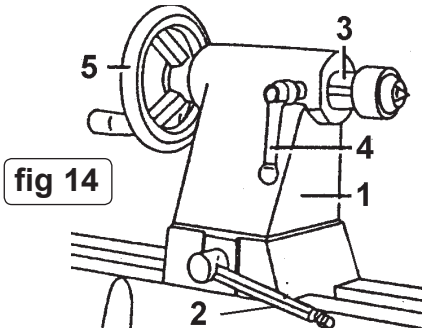
Move the tailstock (fig 14.1) by loosening the locking lever (2), and push the tailstock to the required position on the bed and lock the lever.
The spindle (3) can extend up to 2 1/2" from the tailstock housing. You can move the tailstock spindle (3) by loosening the spindle lock lever (4) and turning 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.

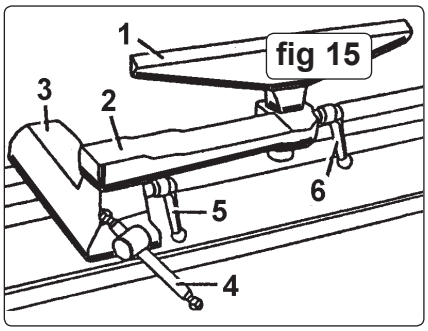
5.4. TOOL REST

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 lathe's applications and limitations. At the same time being fully aware of the 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.

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 will be required for any claim.
INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.

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Bury St. Edmunds, Suffolk,
IP32 7AR
01284 757500 www.sealey.co.uk
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