

Original Instructions

DML250 10" 5 Speed Cast Iron Mini Lathe

15001 (UK version)
15002 (EP version)



Version 3.3
October 2016



To register this product please visit
www.recordpower.info

It is important to register your product as soon as possible in order to receive efficient after sales support and be entitled to the full **5 year guarantee**. Your statutory rights are not affected.
Please see back cover for contact details.



Always wear safety glasses when using woodworking equipment.



Always read the instructions provided before using woodworking equipment.

Important

For your safety read instructions carefully before assembling or using this product.

Save this manual for future reference.

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1. Explanation of Symbols

The symbols and their meanings shown below may be used throughout this manual. Please ensure that you take the appropriate action wherever the warnings are used.

Mandatory Instructions



Read and fully understand the instruction manual before attempting to use the machine.



Indicates an instruction that requires particular attention



Wear protective eyewear



Use respiratory protective equipment



Use hearing protection



Use suitable protective footwear



Use protective work gloves

Warnings



Indicates a risk of severe personal injury or damage to the machine



Indicates a risk of severe personal injury from electrical shock



Risk of personal injury from lifting of heavy items



Indicates a risk of severe personal injury from airborne objects



Risk of fire

2. General Power Tool Safety Warnings



WARNING: Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work Area Safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical Safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

3) Personal Safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

4) Power Tool Use and Care

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e) **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

3. Woodturning Lathe Safety Warnings

Safe Operation

Familiarise yourself with the machine

- Machining operations using wood turning lathes have a history of serious accidents. Most serious accidents resulted from the work piece being thrown from the lathe whilst turning. Other accidents can be caused by loose clothing being drawn in to the rotating work piece or hands becoming trapped between the rotating work piece and fixed parts of the lathe.

2. Before switching the machine 'ON'

- Before attaching a work piece to a faceplate, always prepare it to be as round as possible. This will minimise vibration whilst turning. For further instructions please see the section of this manual entitled **Intended Use of the Lathe and Basic Woodturning Instructions**.
- Adjust the tool rest to the correct height and distance from the work piece and check that all fixings are secure.
- Check that the size of the work piece is within the safe working capacities of the lathe as detailed in the manual.
- Select the correct speed according to the size and type of work piece. The slowest speed is the safest speed to start any new work piece.
- Always rotate the work piece by hand before starting the lathe to ensure it does not come into contact with the tool rest. If the work piece strikes the tool rest during operation, it could be split and thrown from the lathe.
- When using a faceplate always ensure the work piece is well secured with screws of a suitable diameter and length.
- Remove any loose knots and bark from the work piece before mounting it to the lathe.
- If mounting a work piece between centres, always ensure that the tailstock is correctly adjusted and fully secure. Check that the locking handle for the tailstock barrel is fully tightened.

3. Whilst using the lathe

- Do not allow the turning tool to dig in to the work piece, which could result in the work piece splitting or being thrown from the lathe. Always position the tool rest at the correct height. For further instructions please see the section of this manual entitled **Intended Use of the Lathe and Basic Woodturning Instructions**.
- Before starting to machine a work piece that is off centre or not perfectly round, always set the machine to the slowest speed and gradually increase speed as the work piece becomes more balanced as material is removed. Running the lathe too fast could cause the work piece to be thrown from the lathe or the turning tool to be snatched from your hands.
- Always store turning tools in a safe place away from the work area of the lathe. Never reach over the rotating work piece to reach for turning tools or accessories.
- Never attempt to adjust the position of the tool rest whilst the machine is running. Always switch the machine 'OFF' and wait until the work piece has stopped rotating before attempting any adjustments.
- Do not mount a work piece that contains excessive splits or loose knots or bark.
- Keep firm hold and control of the turning tool at all times. Use extreme caution when knots and voids are exposed in the work piece.
- Finish all hand sanding before removing the work piece from the lathe. Do not exceed the speed used for the last cutting operation. For further instructions please see the section of this manual entitled **Intended Use of the Lathe and Basic Woodturning Instructions**.
- Do not attempt to remount a work piece that has been turned on a faceplate unless you are deliberately turning eccentric work. You cannot remount faceplate turned work and expect it to run true, as the timber will have expanded or contracted.

- Do not remount a work piece that has been turned between centres if the original centres have been altered or removed, unless you are deliberately turning eccentric work.
- If re-mounting any work piece, always set the machine to the slowest speed and gradually increase the speed as the work piece becomes more balanced as material is removed.
- Use extra caution when mounting a work piece that has been turned between centres to a faceplate, or when mounting a faceplate turning between centres, for subsequent machining operations. Always ensure that the lathe is set to the slowest speed before switching ON.
- Do not attempt to perform any machining operations when holding the work piece by hand.
- Do not mount a reamer, milling cutter, wire wheel, buffing wheel, drill bit or any other tool to the headstock spindle.
- Always ensure that the turning tool is in contact with the tool rest and fully supported before applying the tool to the work piece.
- When the tool rest holder unit is not in use (e.g. when sanding), it should be moved away from the headstock, and the tool rest removed.

4. Maintenance

- Before attempting any maintenance and particularly when cleaning the machine, always remove any accessories and tooling from the machine.
 - Always ensure that any accessories used on the lathe are kept clean and free from rust and deposits of resin.
 - Keep all turning tools sharp and in good condition. Check that the handles are secure and not split or damaged.
5. This machine falls under the scope of the 'Health and Safety at Work etc. Act 1974', and the 'Provision and Use of Work Equipment Regulations 1998'. In addition the elimination or control of risks from wood dust is included in the above regulations and the 'Control of Substances Hazardous to Health (COSHH) Regulations 2002'. We recommend that you study and follow these regulations.

Further guidance is available from The Health and Safety Executive and their website www.hse.gov.uk and from the authorised distributor in your country (details on back cover of the manual).

4. Record Power Guarantee

“**Products**” means the Products sold by Record Power subject to these terms and conditions;

“**Record Power**” is Record Power Limited, whose company registration number is 4804158 and registered office address is Centenary House, 11 Midland Way, Barlborough Links, Chesterfield, Derbyshire S43 4XA and sells through a network of Authorised Dealers;

“**Authorised Distributor**” is the nominated importer for your region who will generally sell through a network of Authorised Dealers. Details of Authorised Distributors for specific countries can be found in the Product manual or at www.recordpower.info;

“**Authorised Dealer**” is a retailer or business authorised to sell Record Power Products to end users.

1 Guarantee

- 1.1 Record Power guarantees that for a period of 5 years from the date of purchase the components of qualifying Products (see clauses 1.2.1 to 1.2.9) will be free from defects caused by faulty construction or manufacture.
- 1.2 During this period Record Power, its Authorised Distributor or Authorised Dealer will repair or replace free of charge any parts which are proved to be faulty in accordance with paragraphs 1.1 above provided that:
 - 1.2.1 you follow the claims procedure set out in clause 2 below;
 - 1.2.2 Record Power, our Authorised Distributor or Authorised Dealer are given a reasonable opportunity after receiving notice of the claim to examine the Product;
 - 1.2.3 if asked to do so by Record Power, its Authorised Distributor or Authorised Dealer, you return the Product, at your own cost, to Record Power’s premises or other approved premises such as those of the Authorised Distributor or supplying Authorised Dealer, for the examination to take place;
 - 1.2.4 the fault in question is not caused by industrial use, accidental damage, fair wear and tear, wilful damage, neglect, incorrect electrical connection, abnormal working conditions, failure to follow our instructions, misuse, or alteration or repair of the Product without our approval;
 - 1.2.5 the Product has been used in a domestic environment only;
 - 1.2.6 the fault does not relate to consumable Products such as blades, bearings, drive belts or other wearing parts which can reasonably be expected to wear at different rates depending on usage (for full details contact Record Power or your local Authorised Distributor);
 - 1.2.7 the Product has not been used for hire purposes, by you or by a previous owner;
 - 1.2.8 the Product has been purchased by you as the guarantee is not transferable from a private sale.
 - 1.2.9 where the Product has been purchased from a retailer, the 5 year guarantee is transferable and begins on the date of the first purchase of the Product and in the event of a claim under this guarantee proof of the original purchase date will be required to validate the warranty period.

2 Claims Procedure

- 2.1 In the first instance please contact the Authorised Dealer who supplied the Product to you. In our experience many initial problems with machines that are thought to be due to faulty parts are actually solved by correct setting up or adjustment of the machines. A good Authorised Dealer should be able to resolve the majority of these issues much more quickly than processing a claim under the guarantee.
- 2.2 Any damage to the Product resulting in a potential claim under the guarantee must be reported to the Authorised Dealer from which it was purchased within 48 hours of receipt.
- 2.3 If the Authorised Dealer who supplied the Product to you has been unable to satisfy your query, any claim made under this Guarantee should be made directly to Record Power or its Authorised Distributor (for details of the Authorised Distributor in your country please see your Product manual or check www.recordpower.info for details). The claim itself should be made in a letter setting out the date and place of purchase, and giving a brief explanation of the problem which has led to the claim. This letter should then be sent with proof of the purchase date (preferably a receipt) to Record Power or its Authorised Distributor. If you include a phone number or email address this will help to speed up your claim.
- 2.4 Please note that it is essential that the letter of claim reaches Record Power or its Authorised Distributor on the last day of this Guarantee at the latest. Late claims will not be considered.

3 Limitation of Liability

- 3.1 We only supply Products for domestic and private use. You agree not to use the Product for any commercial, business or re-sale purposes and we have no liability to you for any loss of profit, loss of business, business interruption or loss of business opportunity.
- 3.2 This Guarantee does not confer any rights other than those expressly set out above and does not cover any claims for consequential loss or damage. This Guarantee is offered as an extra benefit and does not affect your statutory rights as a consumer.

4 Notice

This Guarantee applies to all Products purchased from an Authorised Dealer of Record Power within the United Kingdom of Great Britain and Northern Ireland. Terms of Guarantee may vary in other countries – please check with the Authorised Distributor in your country (details of the Authorised Distributor for your country can be found in the manual or at www.recordpower.info).

5. Specifications

Voltage: 230 V

Frequency: 50 Hz

Motor input P1: 0.375 kW

Motor output P2: 0.25 kW

Motor speed: 1400 rpm

Full load current: 1.6 A

Max. bowl diameter: 254 mm (10")

Max. between centres: 457 mm (18")

Max. swing over bed: 254 mm (10")

Spindle speeds: 450, 980, 1550, 1940 and 2640 rpm

Taper: 2 Morse Taper

Spindle travel: 44.5 mm

Size: L902 x D267 x H375 mm

Weight: 34 kg

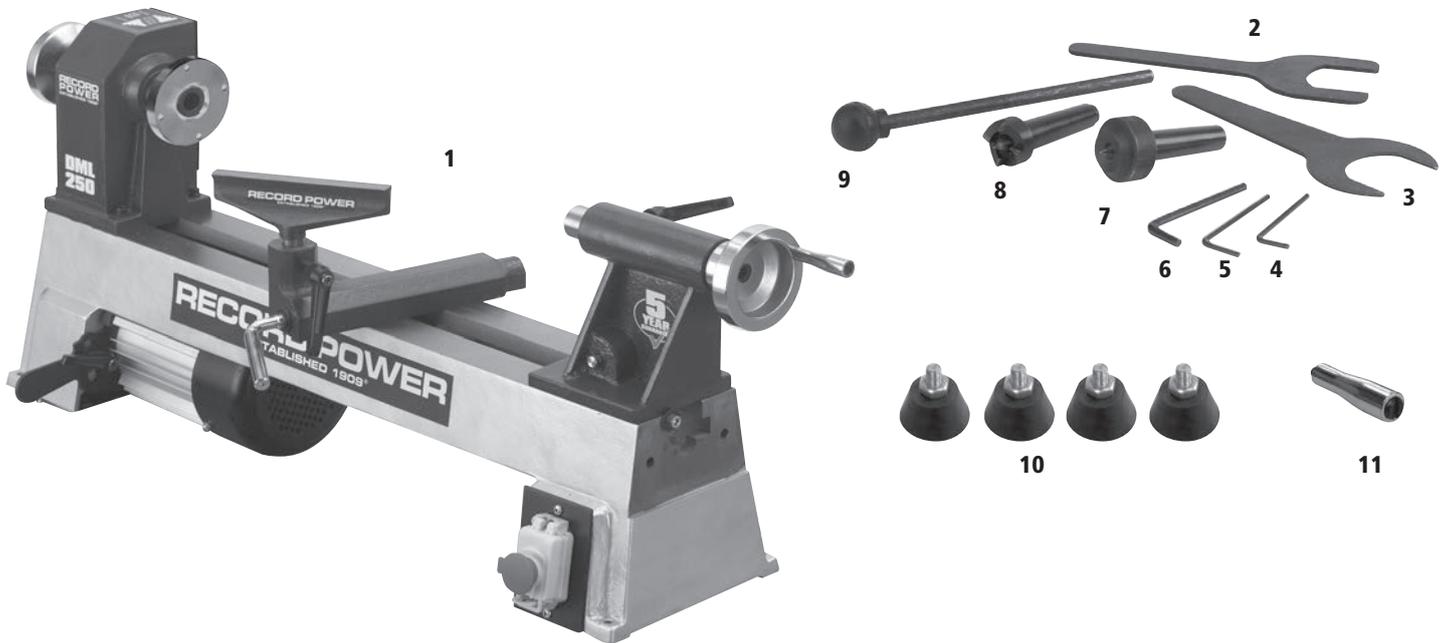
Spindle Thread: M33 x 3.5

Sound Pressure Level: No load 59.3 dB(A)

Sound Power Level: No load 72.3 dB(A)

Measurement uncertainties: 3 dB(A). Tested according to EN 62841-1.

6. Contents of the Package



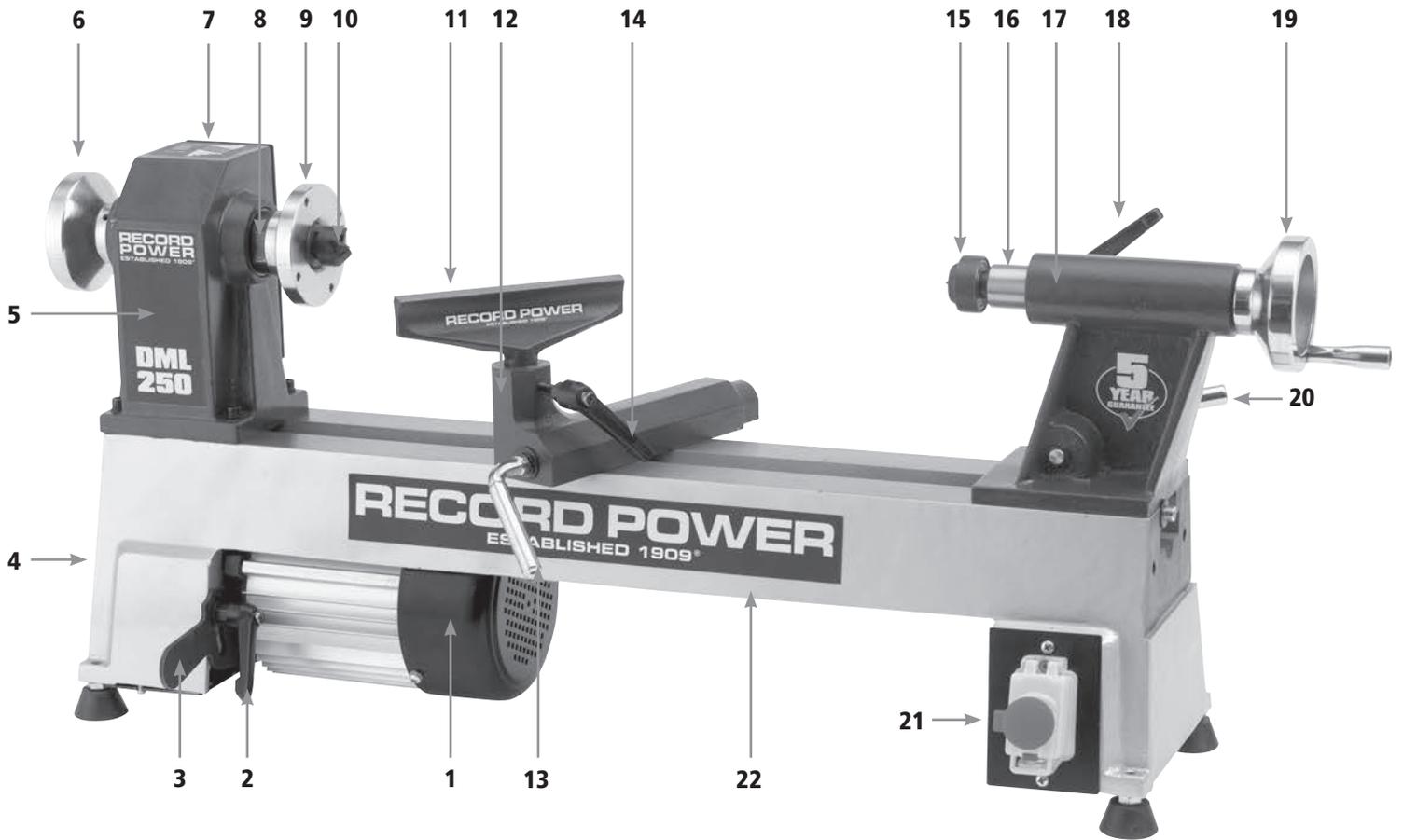
- 1 Lathe with faceplate, tool rest holder, tool rest and tailstock installed
- 2 38 mm spindle wrench
- 3 46 mm faceplate wrench
- 4 3 mm hex wrench
- 5 4 mm hex wrench
- 6 5 mm hex wrench

- 7 Revolving centre
- 8 4 prong drive centre
- 9 Knockout bar
- 10 Rubber feet x 4
- 11 Tailstock hand wheel handle

Unpacking and Cleaning

1. Carefully lift the lathe from the carton and check that all of the components and contents have been included. Place parts on a protected surface.
2. Clean all rust protected surfaces with white spirit. Do not use gasoline, paint thinner, mineral spirits, etc. These may damage painted surfaces. Make sure the area is well ventilated and that there are no naked flames or sources of ignition.
3. Set packing materials and shipping carton aside. Do not discard until the machine has been set up and is running correctly.

7. Getting to Know Your Lathe



- 1 Motor
- 2 Motor securing lever
- 3 Motor positioning lever
- 4 Motor pulley access hatch
- 5 Headstock
- 6 Hand wheel
- 7 Spindle pulley access hatch
- 8 Spindle
- 9 Faceplate
- 10 4 prong drive centre
- 11 Tool rest

- 12 Tool rest holder
- 13 Tool rest holder locking lever
- 14 Tool rest locking lever
- 15 Revolving centre
- 16 Tailstock barrel
- 17 Tailstock
- 18 Tailstock barrel locking lever
- 19 Tailstock hand wheel
- 20 Tailstock locking lever
- 21 On / off switch
- 22 Lathe bed

8. Assembly



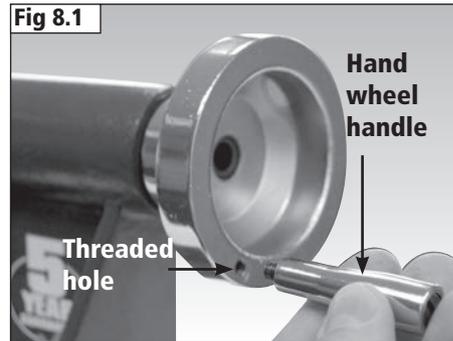
The machine must be unplugged and the power switch must be in the OFF position until the machine is assembled.



The lathe must not be lifted by only one person due to its weight. Always lift with care and hold the lathe by the bed.

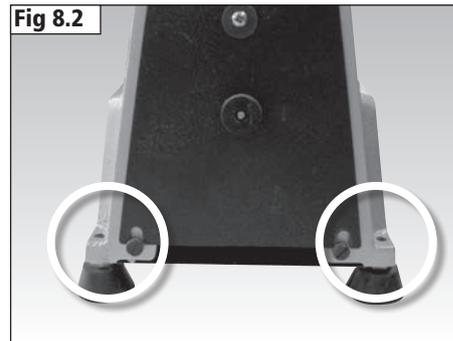
Installing the Tailstock Hand Wheel Handle

Screw the hand wheel handle into the threaded hole on the rear of the tailstock hand wheel, **Fig 8.1**, using a flat blade screwdriver.



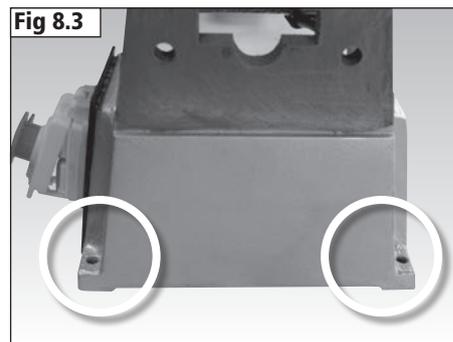
Installing the Rubber Feet

The lathe features 4 threaded holes in the base of the casting to hold the rubber feet, 2 at the headstock end of the lathe, **Fig 8.2**, and 2 at the tailstock end, **Fig 8.3**. Screw each rubber foot to each corner of the lathe as shown in **Fig 8.4**. The rubber feet feature adjusting nuts to allow the machine to be levelled on the surface it is to be used upon.



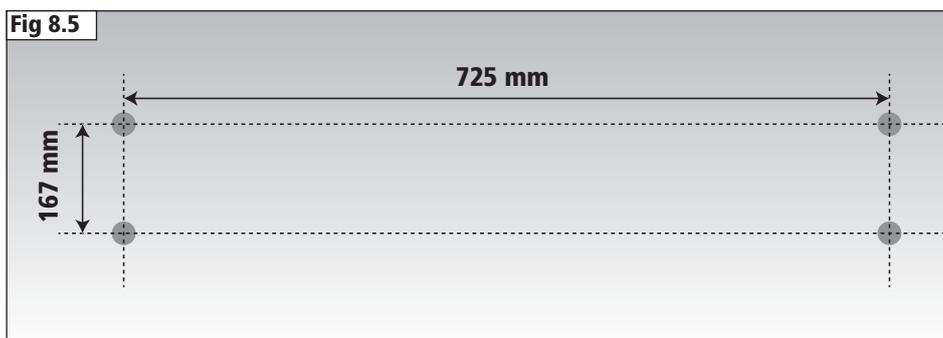
Securing the Lathe to a Solid Work Surface or Suitable Stand

The DML250 can be used freestanding on a bench. If required, the lathe can be attached either to a solid work surface at least 25 mm thick, or a suitable stand, using the 4 mounting holes located at the base of the lathe as shown in **Figs 8.2** and **8.3**. If mounting to a bench, drill holes in the work surface using a 9 mm (5/16") drill bit, following the measurements shown in **Fig 8.5**.



The lathe must only be used when secured in a stable position.

Secure the lathe to the bench using M8 bolts, to match the thread size of the mounting holes. Do not attempt to use bolts of a different size as this may damage the thread of the mounting holes.



8. Assembly

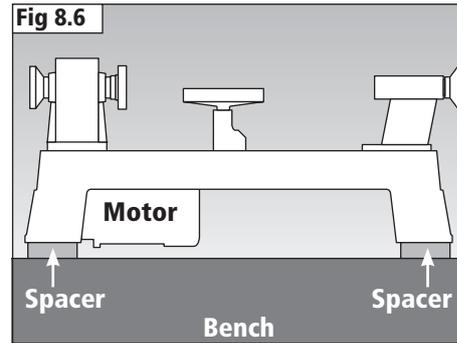


If the lathe is to be attached to a bench, spacers of at least 25 mm (1") depth must be used at each end of the lathe to raise it from the bench surface and allow for movement of the motor, see Fig 8.6.

If the lathe is to be mounted to a stand, unless the mounting plate of the stand allows movement of the motor, spacers must also be used.

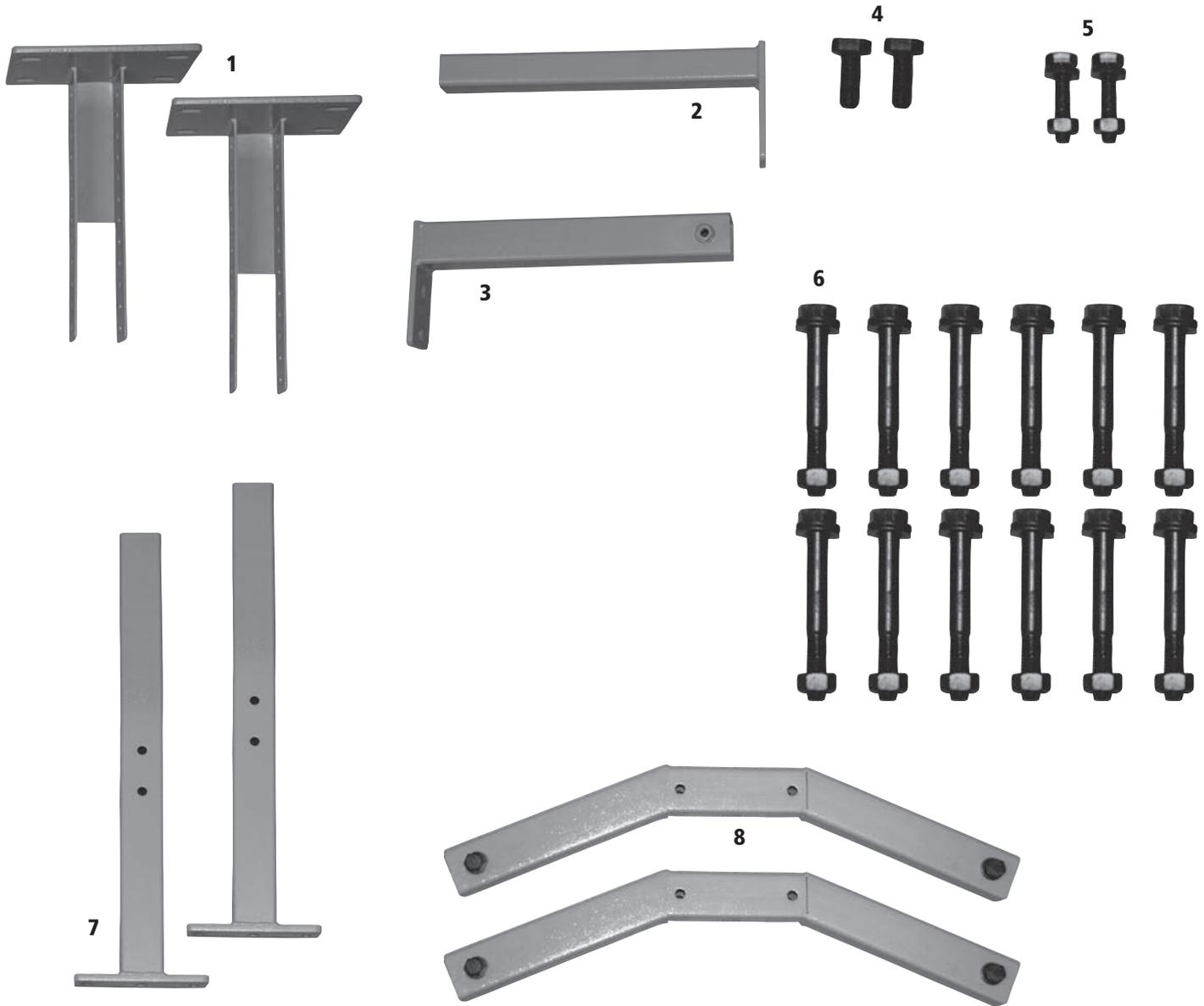


Please note: Use of the DML305/A Leg Stand is recommended. When oriented correctly, the mounting plates of the DML305/A allow for movement of the motor, eliminating the need for spacers.



9. Assembly of the Optional DML305/A Leg Stand

Contents of the Package



Item	Description	Quantity
1	Upright plinths	2
2	Male cross brace	1
3	Female cross brace	1
4	M10 x 25 mm hex head screws	2
5	M8 x 35 mm bolts, nuts and washers	2
6	M10 x 80 mm bolts, nuts and washers	12
7	Upright columns	2
8	Bases	2

9. Assembly of the Optional DML305/A Leg Stand

Using an 18 mm wrench (not supplied) attach the upright column to the base using 2 M10 x 80 mm bolts, ensuring that there is an M10 washer between each bolt and the upright column and another M10 washer between each M10 nut and the base, **Fig 9.1**. Repeat this process to assemble the second base onto the second upright column.

Using a 16 mm wrench (not supplied) attach the upright plinth to the upright column using 2 M10 x 80 mm bolts to the desired height, ensuring that the plate on top of the plinth which will hold the headstock end of the lathe is oriented as shown in **Fig 9.2**. Also ensure that there is at least 1 hole space between the 2 bolts and that both bolts pass through the upright column. **Fig 9.3**. Repeat this process to complete assembly of the second leg.

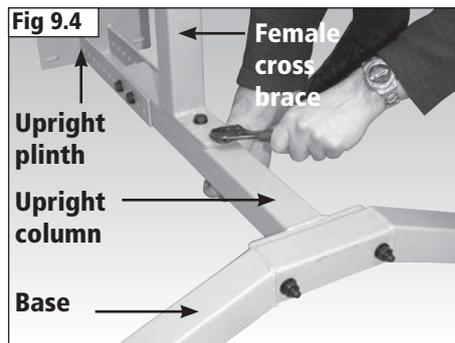
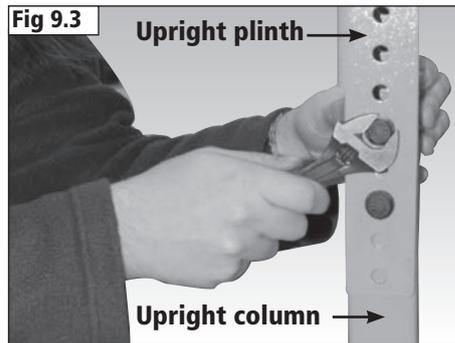
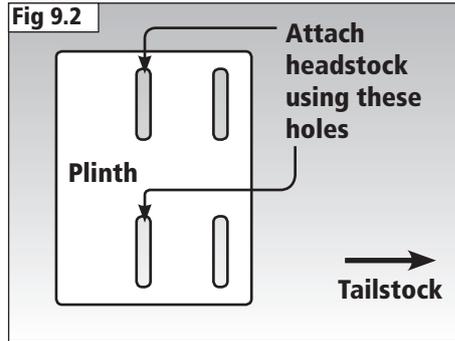
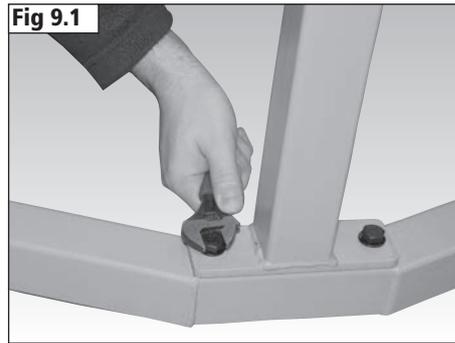


Please note: The leg stand is adjustable in height to allow for comfortable use of the lathe. As a general rule, the centre height of the lathe should be at elbow height.

Using a 16 mm wrench (not supplied) attach the female cross brace to one of the upright columns using two M10 x 80 mm bolts. Attach the male cross brace to the remaining upright column in the same manner, **Fig 9.4**.

To complete assembly of the leg stand, insert the male cross brace into the female cross brace, ensuring that the distance between the mounting holes on the plinths is 725 mm. Using a 16 mm wrench (not supplied) hold in place with 2 M10 x 25 mm hex head screws, **Fig 9.5**.

The remaining bolts, nuts and washers are used to attach the lathe to the stand.



10. Assembly of the Optional DML305/L Extension Support and DML250 Bed Extension

Contents of the DML305/L Extension Support Package

- 1 Upright plinth
- 2 Male cross brace
- 3 Female cross brace
- 4 M10 x 25mm set screws x 2
- 5 M8 x 35 mm bolts, nuts and washers x 2
- 6 M10 x 80 mm bolts, nuts and washers x 6
- 7 Upright column
- 8 Base



Contents of the DML250 Bed Extension Package

- 1 M10 x 30 mm bolts x 2
- 2 Washers x 2
- 3 Spring washers x 2
- 4 Rubber feet x 2
- 5 Bed extension



10. Assembly of the Optional DML305/L Extension Support and DML250 Bed Extension

Assembly of the DML305/L Extension Support

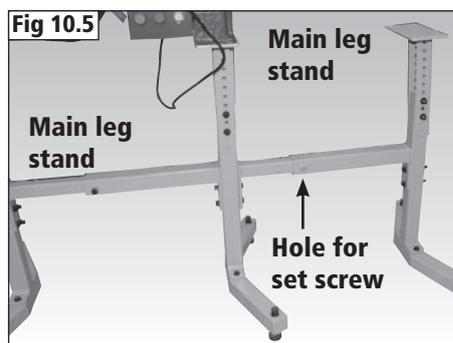
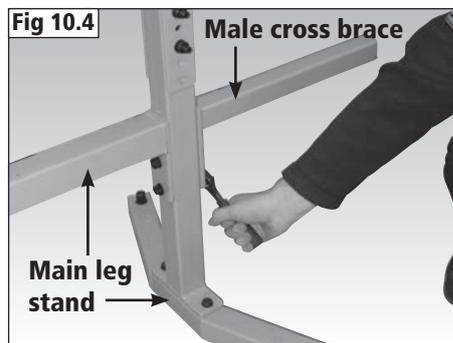
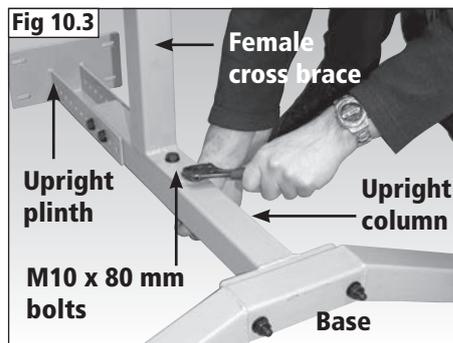
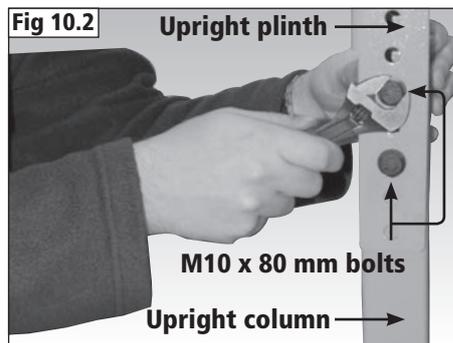
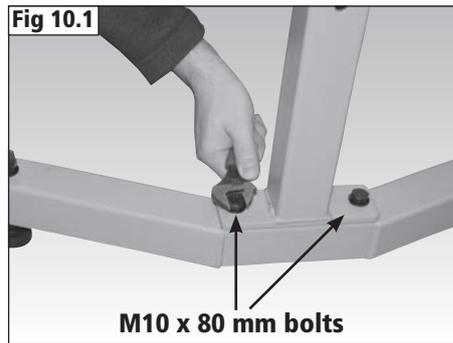
Attach the upright column to the base using 2 M10 x 80 mm bolts, ensuring that there is an M10 washer between each bolt and the upright column and another M10 washer between each M10 nut and the base, **Fig 10.1**.

Attach the upright plinth to the upright column using 2 M10 x 80 mm bolts to the desired height, making sure that the overhang of the plate on top of the plinth is facing towards the inside of the legstand. Also ensure that there is at least one hole space between the 2 bolts and that both bolts pass through the upright column, **Fig 10.2**.

Attach the female cross brace to the upright column of the leg extension using 2 M10 x 80 mm bolts, **Fig 10.3**.

Attach the male cross brace to the main leg stand using the same bolts which hold either the male or female cross brace in place on the main leg stand, **Fig 10.4**. The Leg extension can be mounted to either side of the main leg stand, depending on which way round the lathe was originally attached to the main leg stand.

Set the distance between the main leg stand and the new leg extension so that the bed extension can sit on the leg extension safely. Hold in place by attaching the 2 M10 x 25 mm set screws in the female cross brace, **Fig 10.5**.



10. Assembly of the Optional DML305/L Extension Support and DML250 Bed Extension

Assembly of the DML250 Bed Extension

Before fitting the bed extension the retaining washer and bolt must be removed from the end of the lathe bed, as shown in **Fig 10.6** using a 5 mm hex wrench.

Place a spring washer followed by a washer onto an M10 x 30 mm bolt and screw into the hole on the end of the original bed leaving approximately 15 mm of the 30 mm M10 bolt exposed, **Fig 10.7**.

Repeat this process for the adjacent hole.

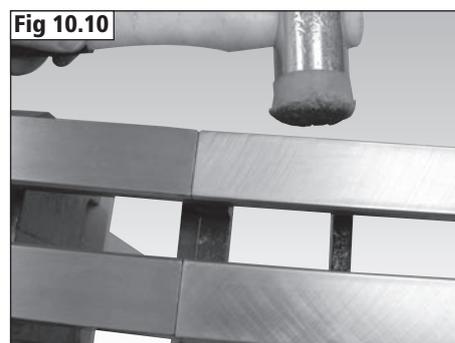
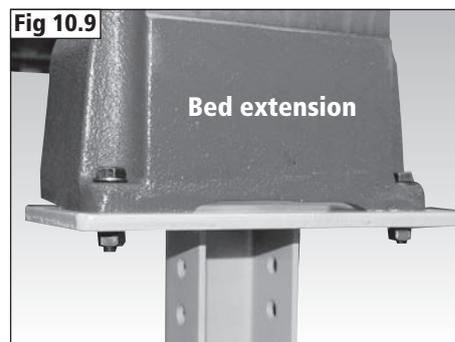
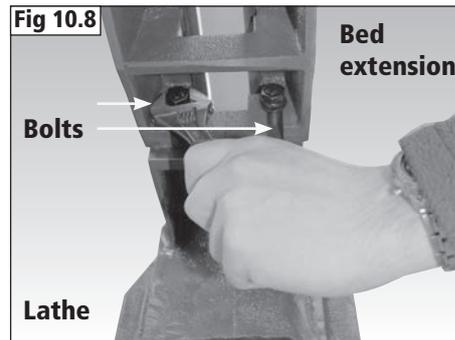
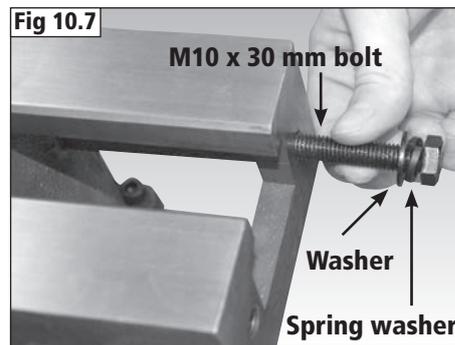
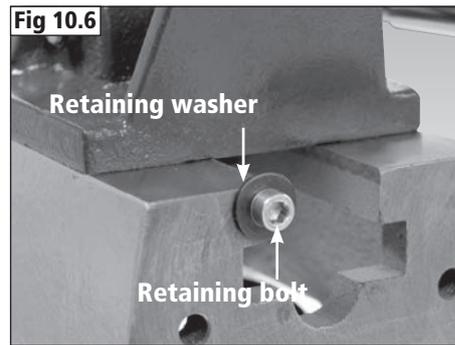
Place the bed extension onto the exposed M10 x 30 mm bolts and tighten the bolts so that they hold the bed extension in place, **Fig 10.8**. Do not tighten the bolts fully as some adjustment may be required to make the bed surfaces flush with one another so that the tailstock runs smoothly between the original bed and the bed extension.

Attach the foot of the bed extension to the top of the upright plinth using M8 x 35 mm bolts with M8 washers (not supplied) on either side of the bed extension and secured with M8 nuts, **Fig 10.9**.

Using a soft mallet, carefully tap the bed extension into position so it is aligned with the original bed extension, ensuring the top surfaces are flush, **Fig 10.10**.

Once the extension is fitted, install the retaining washer and bolt to the end of the bed extension. This will stop accidental removal of the tailstock.

If the lathe is mounted to a bench the rubber feet must be fitted to the bed extension using the 2 threaded holes at the end of the extension.



11. Operation

Using the Faceplate

The DML250 is supplied with an 83 mm (3 1/4") faceplate which is already assembled to the machine as shown in **Fig 11.1**. The faceplate is designed for turning small to medium sized bowls.

Find the centre of the bowl blank and using dividers as shown in **Fig 11.2**, mark an 83 mm diameter circle from the centre of the blank.

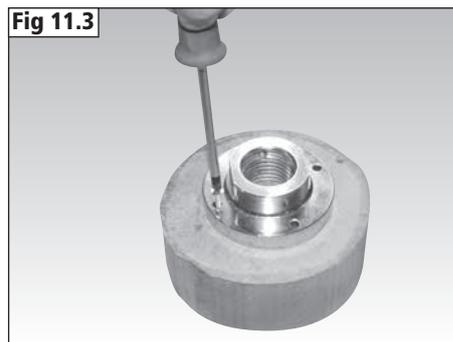
Place the faceplate over the scribed circle and attach it to the blank using 4 woodscrews as shown in **Fig 11.3**. The length of woodscrews used will vary depending on the size of bowl blank and intended finished thickness of the base but the largest possible screws should be used to give maximum hold. Screw the faceplate fully onto the lathe spindle as shown in **Fig 11.4**.

Tighten the blind set screw in the collar of the faceplate using a 3 mm hex wrench as shown in **Fig 11.5**. This will lock the faceplate to the spindle.



Important: Always ensure the faceplate is fully screwed onto the spindle so that the blind set screw tightens against the unthreaded section of the spindle. If the blind set screw is tightened against the spindle thread it may damage it.

When beginning to turn the bowl, proceed with caution and ensure the blank is securely held to the faceplate. For further information on turning bowls please refer to the **Intended use of the Lathe and Basic Woodturning Instructions** chapter of the manual.



11. Operation

Fitting the 4 Prong Drive Centre to the Headstock

When turning between centres the 4 prong drive centre should be used in conjunction with the revolving centre. For details on turning between centres, please refer to the **Intended use of the Lathe and Basic Woodturning Instructions** chapter of the manual.

Before fitting the drive centre the faceplate must be removed from the lathe. Loosen the blind set screw in the collar of the faceplate then using the 2 supplied wrenches, hold the spindle in place with the 38 mm wrench using the flat areas of the spindle collar, **Fig 11.6**, and loosen the faceplate using the 46 mm wrench as shown in **Fig 11.7** by turning in an anti-clockwise direction, placing the wrench on the flat areas of the faceplate collar. Insert the drive centre into the headstock spindle, **Fig 11.8**.

Removing the 4 Prong Drive Centre from the Headstock

The knockout bar is used to remove the drive centre from the headstock spindle. Insert the knockout bar through the hole in the centre of the headstock hand wheel and give the drive centre a sharp tap to dislodge it, **Fig 11.9**.



The knockout bar must only be used while the lathe spindle is stationary.

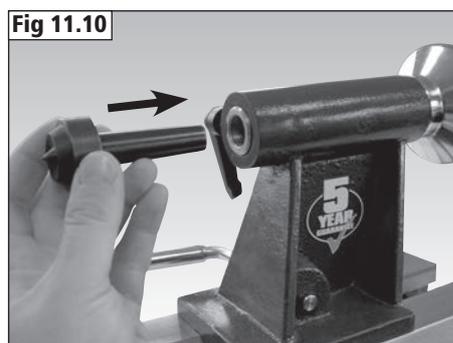
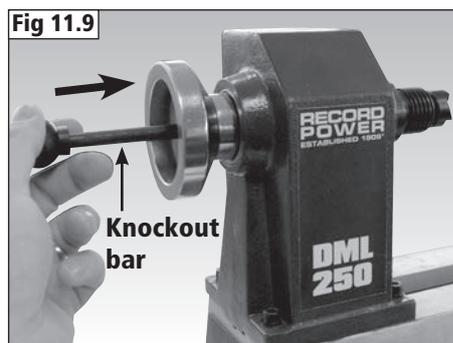
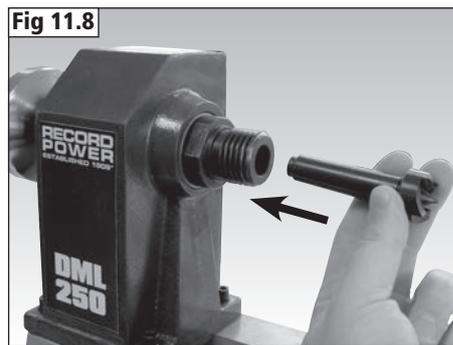
Fitting the Revolving Centre to the Tailstock

When turning between centres the revolving centre should be used in conjunction with the 4 prong drive centre. For details on turning between centres, please refer to the **Intended use of the Lathe and Basic Woodturning Instructions** chapter of the manual.

Insert the revolving centre into the tailstock spindle, **Fig 11.10**, and push it firmly in place.



Please note: Before inserting tapered attachments into the headstock or tailstock spindle, always ensure that the taper is clean and free of any waste material that may cause misalignment or vibration. Always fully seat the taper by tapping it into place with a wooden mallet.



11. Operation

To remove the revolving centre from the tailstock spindle insert the knockout bar into the hole in the centre of the tailstock hand wheel and give the revolving centre a sharp knock to dislodge it from the tailstock, see **Fig 11.11**.

Adjusting the Tool Rest

To move the tool rest across the lathe bed, loosen the tool rest holder locking lever, slide the tool rest holder to the desired position and tighten the locking lever.

To adjust the height of the tool rest loosen the tool rest locking lever, position as required and re-tighten, **Fig 11.12**.

Adjusting the Tailstock

Loosen the tailstock locking lever to move the tailstock along the lathe bed to the desired position and tighten the lever, **Fig 11.13**.

To adjust the tailstock spindle position, loosen the tailstock spindle locking lever and turn the hand wheel. When the tailstock spindle is in the desired position, re-tighten the locking lever, **Fig 11.13**.

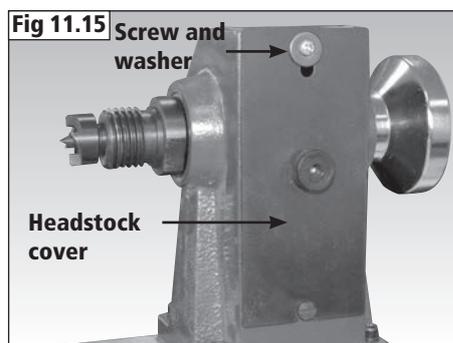
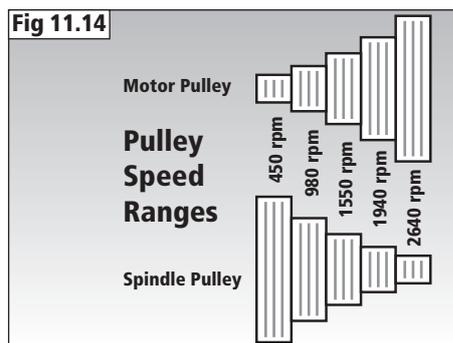
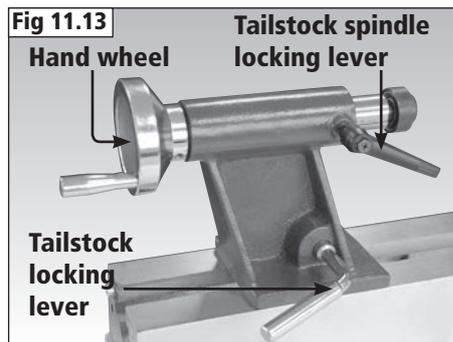
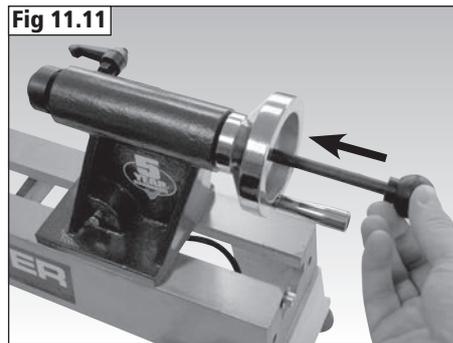
Adjustment of the Clamping Action of the Tool Rest Holder and Tailstock

If the movement of the tool rest holder or tailstock is unsatisfactory, either due to being too stiff and difficult to move or too easy to move and giving inadequate locking, the clamping action can be adjusted. Please see the **Maintenance** section of the manual for full details.

Changing the Spindle Speed

The DML250 features a 5 step pulley system. The drive belt must be positioned on the corresponding pulleys as shown in **Fig 11.14** to achieve the speeds shown.

To access the spindle pulley, remove the cross head screw and washer from the headstock cover using a cross head screwdriver (not supplied), and remove the cover, **Fig 11.15**.



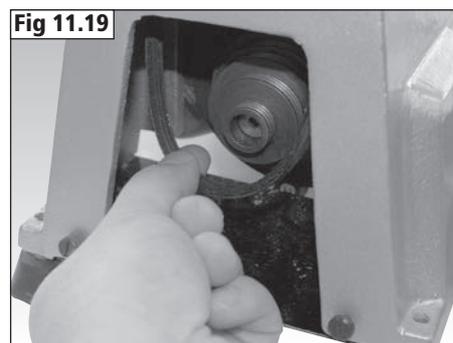
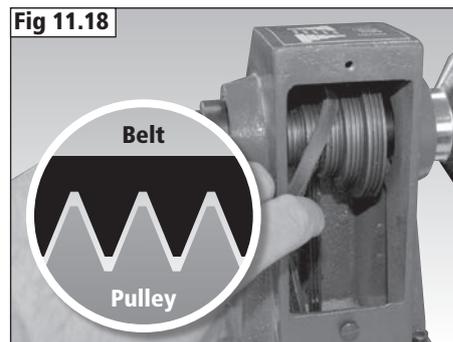
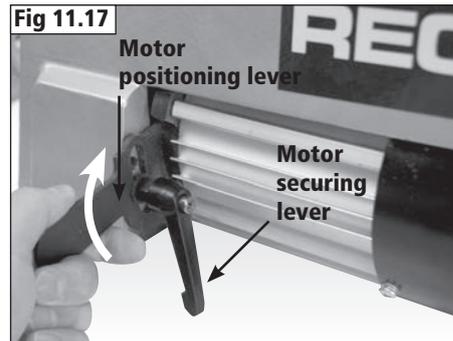
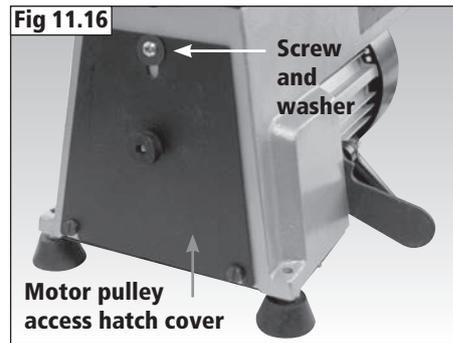
11. Operation

To access the motor pulley remove the cross head screw from the motor pulley access hatch cover using a cross head screwdriver (not supplied) and remove the cover, **Fig 11.16**.

Loosen the motor securing lever and raise the motor to its highest position using the motor positioning lever, **Fig 11.17**, and re-tighten the motor securing lever to hold it in place. The drive belt will now be loose enough to place in the desired position, **Figs 11.18** and **11.19**.

Ensure the V grooves of the drive belt are positioned in the grooves of the pulleys as shown in **Fig 11.18**. Turn the hand wheel by hand to check they are located correctly.

Once the drive belt is positioned as desired, loosen the motor securing lever and lower the motor until it is at its lowest position - The weight of the motor provides sufficient tension to the drive belt. Tighten the motor securing lever, re-fit the headstock cover and the motor pulley access hatch cover.



11. Operation

Operating the Lathe

To turn the lathe on, press the green switch marked 'I' on the switch situated on the lathe bed at the opposite end to the headstock, as shown in **Fig 11.20**.

To stop the machine, press the red button marked 'O' on the control panel as shown in **Fig 11.20**.

In the Event of a Blockage or if the Machine Stalls

If the lathe stalls due to a dig in, simply removing the turning tool from the work piece will normally allow the work piece to start turning again.

In the event of a blockage (for example, if the work piece becomes trapped against a fixed part of the machine) switch off the machine immediately, by pressing the red button marked 'O' on the switch.

Locate and rectify the source of the blockage and ensure that the work piece can be rotated freely by hand before attempting to re-start the machine.

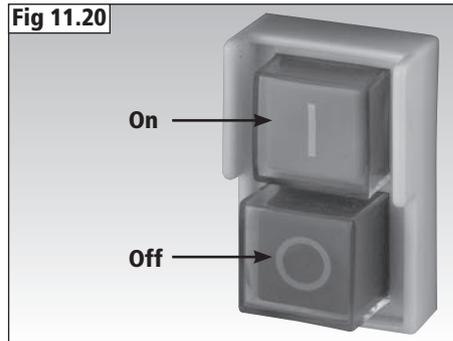
To re-start the machine, press the green button marked 'I' on the switch.

In the Event of a Power Failure

The lathe is fitted with a no volt release (NVR) switch to protect the user against automatic starting of the machine when power is restored after a power failure.

In the event of a power failure, first locate and rectify the source of the failure. If the fault is within the power circuit of the workshop, there may be an underlying cause (circuit overload etc.) that should be investigated by a qualified electrician, before attempting to restore the power source.

Once the power is restored, the machine can be re-started by pressing the green button marked 'I' on the switch.



12. Maintenance

Cleaning the Machine

Avoid build up of wood shavings and dust by regularly cleaning the lathe with a soft cloth or brush.

Adjustment of the Tool Rest Holder

If the movement of the tool rest is unsatisfactory, either due to being too stiff and difficult to move or too easy to move and giving inadequate locking, the clamping action can be adjusted.

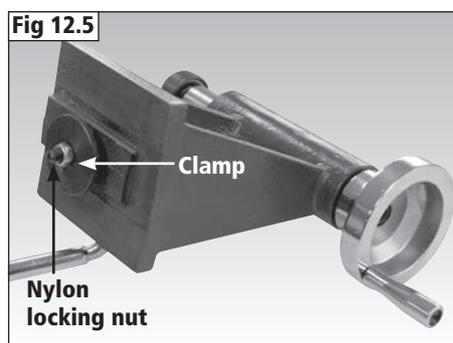
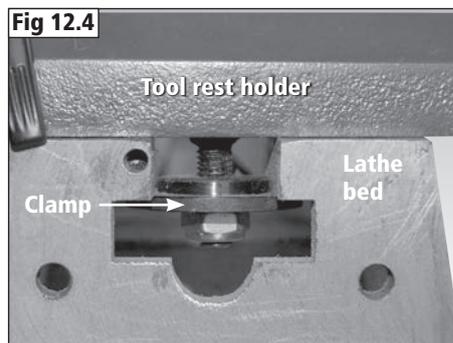
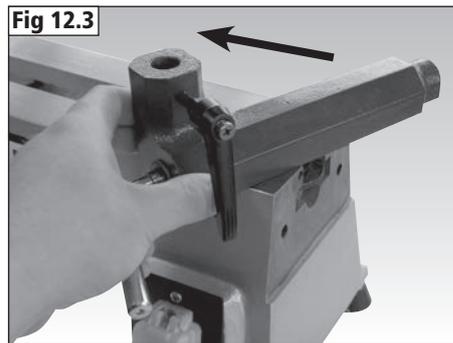
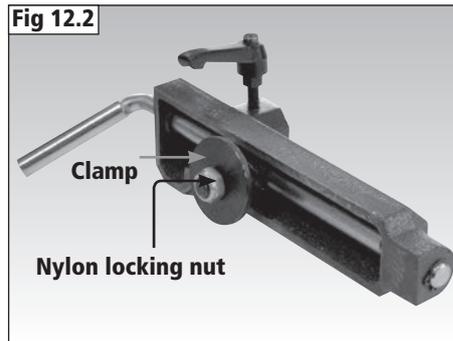
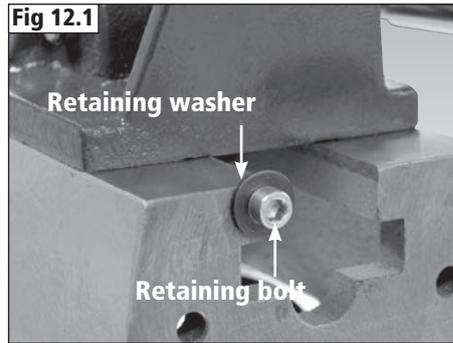
To remove the tool rest holder from the lathe bed, the hex head socket bolt and retaining washer must be removed from the end of the lathe bed as shown in **Fig 12.1**, using a 5 mm hex wrench.

On the underside of the tool rest holder is a bolt with a nylon locking nut which holds the clamp in place, **Fig 12.2**. Loosen the nylon locking nut using a 16 mm wrench (not supplied) until the tool rest holder can be slid onto the lathe bed, **Fig 12.3**.

The nylon locking nut can now be adjusted so the tool rest holder is held firmly on the lathe bed when the cam handle is engaged but can slide freely along its length when loosened, **Fig 12.4**.

Adjustment of the Tailstock

The procedure for adjustment of the tailstock is the same as for the tool rest holder. **Fig 12.5** shows the position of the nylon locking nut and clamp.



12. Maintenance



The machine must be unplugged from the power source while carrying out this procedure.

Changing the Belt

To replace the belt, the spindle shaft must be removed from the headstock.

To access the spindle pulley remove the cross head screw and washer from the headstock cover using a cross head screwdriver (not supplied), and remove the cover, **Fig 12.6**.

To access the motor pulley remove the cross head screw from the motor pulley access hatch cover using a cross head screwdriver (not supplied) and remove the cover, **Fig 12.7**.

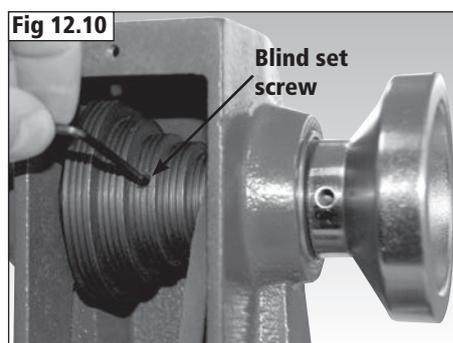
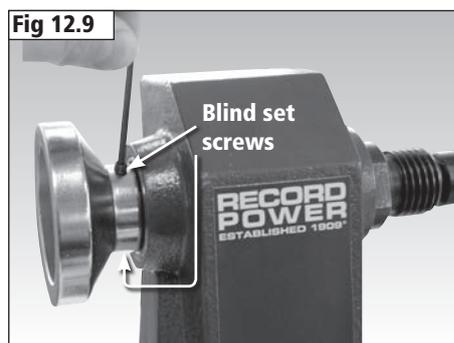
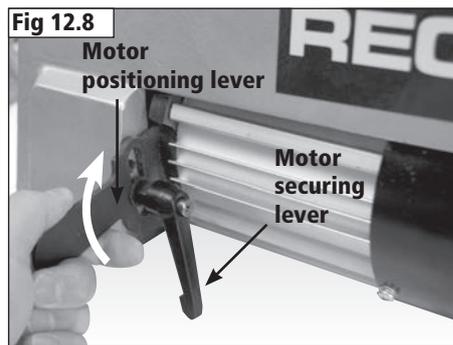
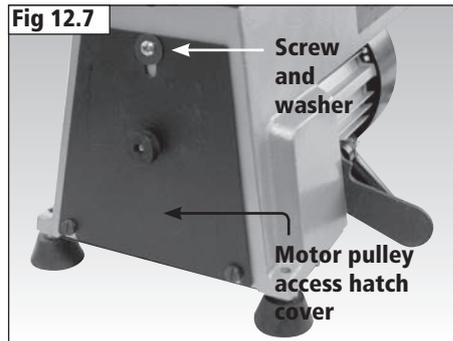
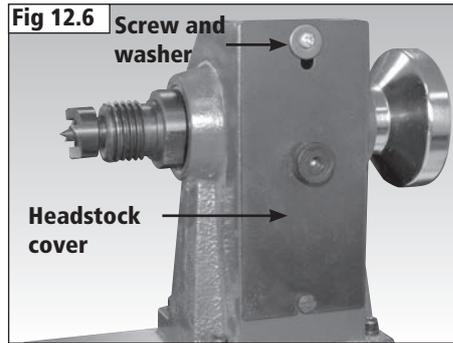
Loosen the motor securing lever and raise the motor to its highest position using the motor positioning lever, **Fig 12.8**, and re-tighten the motor securing lever to hold it in place.

Remove any accessories from the headstock spindle then remove the headstock handwheel by removing the blind set screws located opposite each other in the shaft with a 3 mm hex wrench, **Fig 12.9**.



Please note: The headstock hand wheel features a left-hand thread and must therefore be rotated clockwise to loosen and anti-clockwise to tighten.

Remove the blind set screw that holds the pulley to the spindle using a 3 mm hex wrench, **Fig 12.10**.



12. Maintenance

Once the spindle pulley is loose, carefully knock the spindle out of the headstock using a soft headed mallet as shown in **Fig 12.11** by knocking firmly towards the tailstock end.



Please note: The headstock features a circlip inside each recess that houses the bearings as shown in Fig 12.12. The purpose of these circlips is to retain the bearings in the correct position and they must not be removed.

When the spindle is loose, the old belt can be removed and replaced, **Fig 12.13**, before re-installing the pulley and spindle to the headstock.

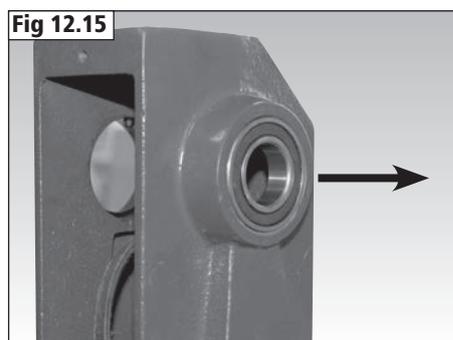
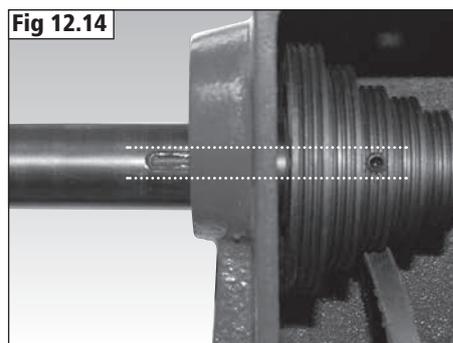
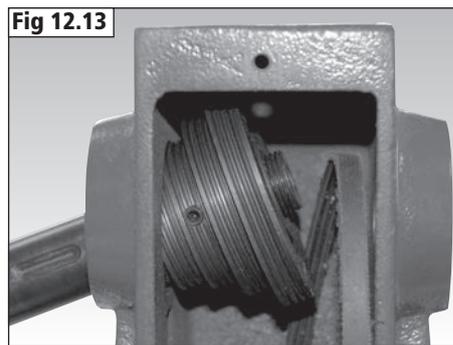
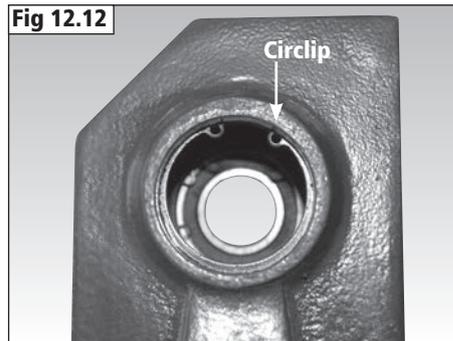
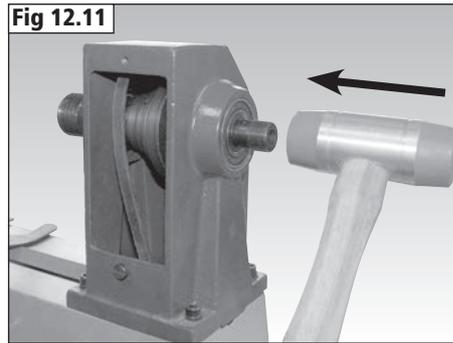
When re-attaching the pulley to the spindle, ensure that the recessed area of the spindle is aligned with the blind set screw of the pulley to ensure maximum hold, as shown in **Fig 12.14**.

Replacing the Bearings

To remove the old bearings, remove the upper spindle as previously described. This will leave the bearings in the headstock free for removal.

Using a soft mallet, carefully but firmly knock each bearing out of the headstock from the inside so the bearings are pushed out of the headstock, **Fig 12.15**.

Once removed, replace with new bearings and re-assemble the headstock.



12. Maintenance

Cleaning the Tailstock Barrel

It is advisable to periodically check the thread of the tailstock barrel lead screw for build up of residue and dust which could impair its movement.

To access the lead screw, first remove the blind set screw of the handwheel using a 3 mm hex wrench as shown in **Fig 12.16** and remove the handwheel to expose the rear of the lead screw, **Fig 12.17**.

Loosen the tailstock retaining lever and pull out the tailstock barrel, **Fig 12.18**.

Unscrew the lead screw fully as shown in **Fig 12.19**.



Please note: The thread is left handed and works in the opposite direction to conventional threads.

Clean all residue and debris from the thread using a degreasing agent and replace the lead screw inside the tailstock barrel.

Refit the lead screw into the barrel and insert the barrel back into the tailstock, ensuring the flattened area is in line with the tailstock locking lever's screw, as shown in **Fig 12.20**.

Fig 12.16

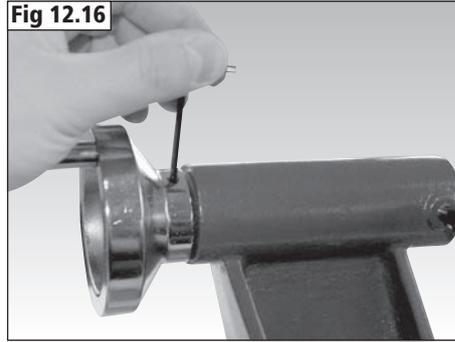


Fig 12.17

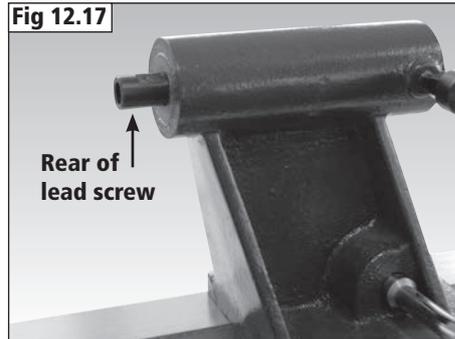


Fig 12.18

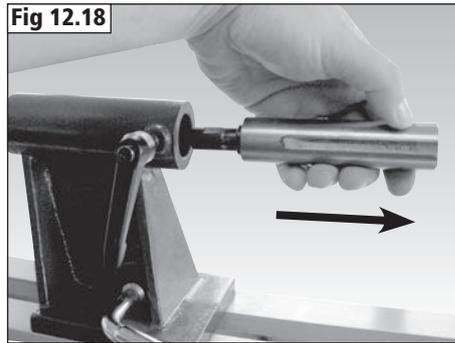
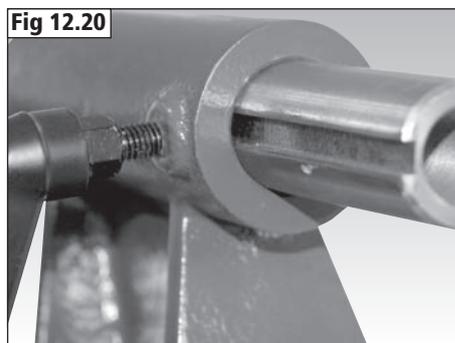


Fig 12.19

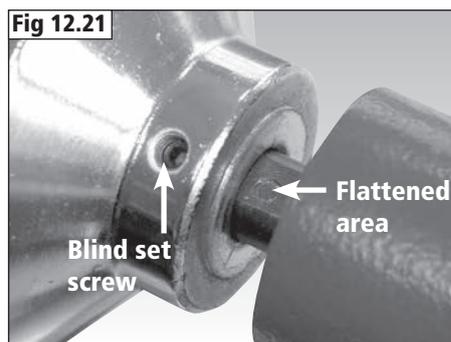


Fig 12.20



12. Maintenance

Push the tailstock barrel in as far as possible and re-attach the handwheel, ensuring the blind set screw is secured to the flattened area of the shaft as shown in **Fig 12.21**.



13. Intended Use of the Lathe and Basic Woodturning Instructions

Intended Use of the Lathe

This lathe is designed for turning wood between centres or on the headstock (using appropriate accessories), for sanding and applying finishes to wood. It is not to be used for any other purpose. Doing so will invalidate the warranty and may cause serious harm to the user.

Health and Safety

Please read the health and safety instructions contained in this manual and the specific health and safety instructions relating to woodturning. In addition, it is recommended to ensure your work area is adequately equipped with dust extraction and air filtration equipment.



Respiratory equipment should also be used to greatly reduce lung exposure to harmful fine dust. Always establish the properties of the timber being turned and take extra care when working with harmful and carcinogenic materials.



Eye protection must always be worn. Due to the nature of woodturning, shavings, dust and splinters can be thrown at fast speeds, making adequate eye protection essential.

Mounting Timber to a Faceplate or Chuck

Before mounting the workpiece to a faceplate or chuck, it is advisable to shape the timber into as cylindrical a profile as possible, see **Fig 13.1**. Turning unbalanced timber increases lathe vibration, the risk of it being thrown from the lathe, increased risk of chisel dig in and makes correct positioning of the tool rest difficult due to variable distances.

Mounting Timber Between Centres

When turning between centres, it is essential to correctly and securely mount the timber so as to reduce the risk of it being thrown from the lathe. It is also essential to mount the timber as centrally as possible. This will reduce the amount of roughing out needed and also maximise the possible diameter of the final piece.

1. Using a square or rectangular profile blank, draw two lines, one from each opposing diagonal corner to the other, at each end of the blank. The point where the lines intersect indicates the centre of the blank. See **Fig 13.2**. If using irregular shaped timber, a centre finder is an invaluable tool.
2. Take the four prong centre supplied with the lathe and place its point directly on to the centre point of one end of the blank. Using a soft mallet (of either plastic, rubber or wood) tap the four prong centre with reasonable force until it bites into the timber. See **Fig 13.3**.
3. Carefully place the four prong centre into the headstock spindle of the lathe, **Fig 13.4**, and ensure that it is correctly seated in the spindle by tapping it firmly into place with a mallet.
4. Slide the tailstock up the bed until the tailstock centre is almost touching the other end of the blank. Lock the tailstock in position and use the hand wheel to extend the tailstock centre until it grips the blank firmly at the centre point. See **Fig 13.5**. Then use the tailstock locking handle to secure the position. The blank is now successfully mounted and ready to be turned.

Fig 13.1

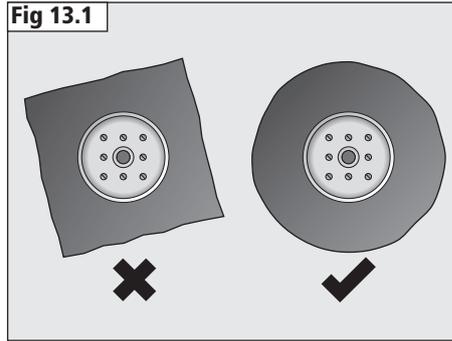


Fig 13.2

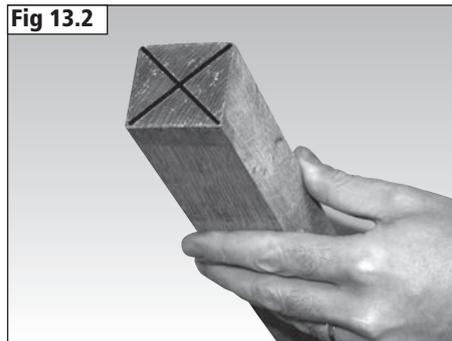


Fig 13.3



Fig 13.4

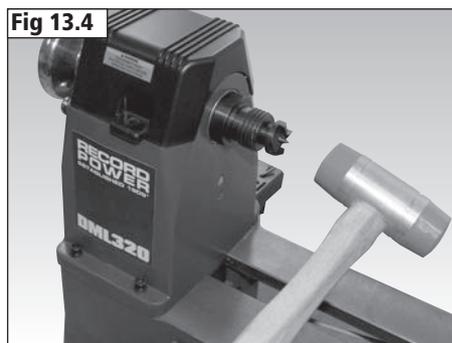


Fig 13.5



13. Intended Use of the Lathe and Basic Woodturning Instructions

Positioning the Tool Rest

It is extremely important to ensure the tool rest is correctly positioned before turning on the lathe. Place the tool rest close to the timber, allowing enough room to manoeuvre the chisel with ease. Spin the timber by hand to ensure it does not come into contact with the tool rest. If the lathe is started without checking this and the timber hits the tool rest, there is a risk the timber could be thrown from the lathe and cause injury. Never attempt to reposition the tool rest while the lathe is in motion.

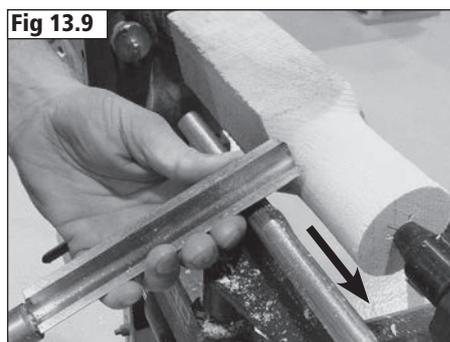
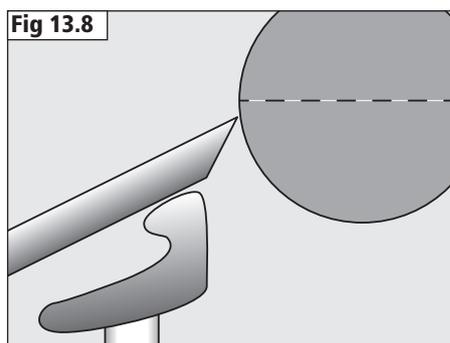
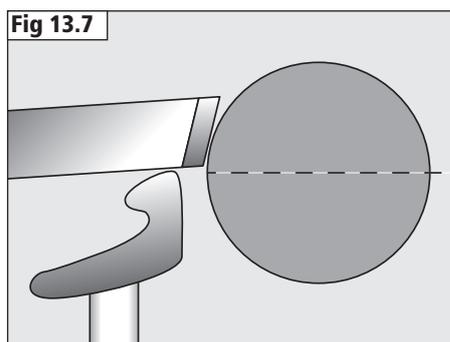
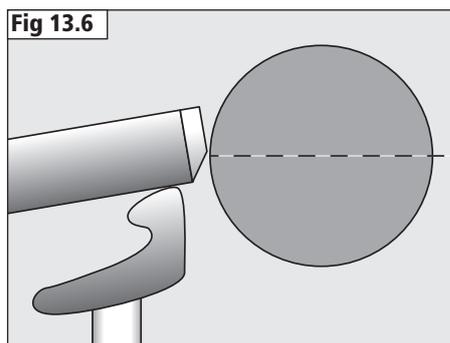
Tool rest height is also important and varies depending on the chisel being used. When using a roughing gouge, the cutting edge should come into contact with the centre of the workpiece, see **Fig 13.6**. If using a skew chisel, the cutting edge should be applied approximately 3/8" (10 mm) above the centre height, see **Fig 13.7**. A spindle gouge's cutting edge should come into contact with the workpiece approximately 3/8" (10 mm) below its centre, see **Fig 13.8**.

Using the Roughing Gouge

The first step when turning between centres is invariably to 'rough out' the blank. This involves taking a square section blank and paring it down with a roughing gouge to a cylindrical profile, ready to shape into the final piece. Roughing gouges are usually sharpened to have the bevel at a 45° angle. Using the tool rest to support the blade, offer the blade to the workpiece at an angle, see **Fig 13.9**. When offering the roughing gouge to the workpiece, the bevel should be rubbing it, without cutting. To make a cut, gently raise the handle of the tool in order to bring the cutting edge into contact with the timber. Using light passes, move the blade outwards towards the same edge of the timber which the blade is facing, **Fig 13.9**. Never move the tool backwards, as this introduces the risk of splintering the wood and causing injury.

Using the Spindle Gouge

A spindle gouge is used to shape the final profile of a spindle and is capable of finer work than a roughing gouge. It is designed specifically for cutting coves or valleys. The blade should come into contact with the wood at just below the centre line. Resting it on the tool rest, apply the blade to the workpiece at an angle, see **Fig 13.10**, rubbing the bevel onto it. Raise the handle to apply the cutting edge and make cuts. As with the roughing gouge, use controlled and light passes, trying to not remove too much wood at once. Never attempt to use a spindle gouge for working on bowls or hollow form work as the angle of the cutting bevel of the gouge is too shallow and will cause it dig in to the work piece or snatch the tools from your hands.



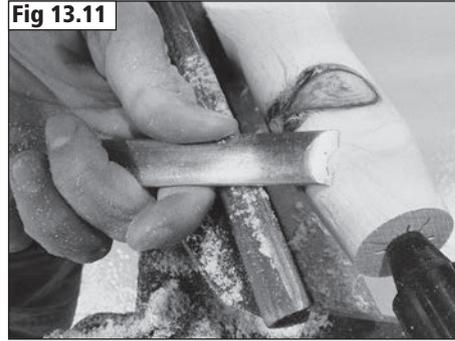
13. Intended Use of the Lathe and Basic Woodturning Instructions

Using the Skew Chisel

Skew chisels are available in both flat and oval profiles. The curved profile is favoured by many as it gives better results more easily. Skew chisels are ideal for creating beads, refining the profiles and can be used to create a final smooth finish to the workpiece. The skew chisel should be applied to the workpiece horizontally with the blade resting on the tool rest, **Fig 13.11**, again with the bevel rubbing the workpiece and raising the handle to take careful, controlled cuts.

Further Operations

The guidelines above give basic instructions on some of the most common woodturning procedures. There are a wide variety of specialised chisels and many complementary accessories available for Record Power lathes which enable a huge variety of work to be created. For further instructions on more advanced safe and effective woodturning, please seek professional training.



Speeds of the Lathe

To ensure the safest possible use of the lathe, it is important to understand which speeds are suited to which tasks. In general, the slower speeds should be used for the initial turning and roughing out of large pieces and the slowest speed should be used when large pieces are out of balance. This will reduce the possibility of the workpiece being thrown from the lathe.

Medium speeds are ideally suited for general purpose work which doesn't place heavy loads on the spindle of the lathes, for example when creating the profiles of spindles and some smaller bowl turning.

The fastest speeds should be used only for small diameter work, where the size of workpiece is relatively small and therefore poses a lower risk of causing damage. Extra care should be taken when turning at the fastest speeds, using only a relatively light touch.

When sanding, care should be taken to not burn the operator's hands or the workpiece. It is recommended to not exceed the speed used for the last turning operation. If in doubt, use a slow speed.

14. Dust Extraction

The Importance Of Dust Extraction

Before the machine is started, ensure that adequate dust extraction provisions have been installed. Dust extraction is extremely important not only for health and safety but also for the correct upkeep of the machine. Saw dust can cause the machine not to operate properly or even fail completely. By keeping the machine free of large amounts of waste the performance will be optimised.

If a large amounts of MDF or toxic woods are to be cut we recommend that there is a good ventilation system in place and that in addition to proper extraction a mask or respirator be worn as minimum protection.

Record Power Extractors

Record Power offer a range of high quality dust extractors, we offer both drum and bag type extractors which filter down 0.5 micron providing protection from harmful fine dusts. All Record Power dust extractors and chip collectors have 100 mm inlets and hoses.

DX1000 High Filtration Dust Extractor

Drum type extractor, 45 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.

0.5 micron filtration

RSDE1 High Filtration Dust Extractor

Drum type extractor, 45 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.

0.5 micron filtration

RSDE2 High Filtration Dust Extractor

Drum type extractor, 50 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.

0.5 micron filtration

RSDE/2A High Filtration Dust Extractor with Auto Switching

Drum type extractor, 50 litre capacity, single 1 kW motor, auto switching allows the machine to be turned on and off as machines and power tools are operated. Suitable for intermittent use ie must be switched off for 20 minutes every hour. Maximum auto switch capacity tools up to 1.1 kW.

0.5 micron filtration

DX4000 High Filtration Dust Extractor

Drum type extractor, 80 litre capacity, Twin 1 kW motor, suitable for heavy usage ie if one motor is switched off for 20 minutes then the other can be used thus enabling continuous usage. Or both motors can be used simultaneously giving maximum suction but in this mode the extractor must be switched off for 20 minutes every hour. **0.5 micron filtration**

DX5000 High Filtration Dust Extractor

Bag type extractor, 200 litre capacity, Twin 1 kW motor, suitable for heavy usage ie if one motor is switched off for 20 minutes then the other can be used thus enabling continuous usage. Or both motors can be used simultaneously giving maximum suction but in this mode the extractor must be switched off for 20 minutes every hour. **0.5 micron filtration**

CX2000 Compact Chip Extractor

Medium capacity chip collector, with a powerful 0.56 kW induction motor. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

CX2500 Chip Collector

Large capacity chip collector, with a powerful 0.55 kW induction motor. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

Suitable for chip collection or finer dust using the optional filter cartridge

CX3000 Chip Collector

Larger capacity chip collector, with a more powerful 0.75 kW induction motor and heavy duty construction. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

Suitable for chip collection or finer dust using the optional filter cartridge

Air Cleaners

It is strongly advised to also use an air cleaner to remove the fine airborne dust present in the workshop which cannot be removed using machine extraction. Record Power offer a range of air cleaners suitable for all home workshops. Please contact your preferred stockist or visit www.recordpower.info.

	DX1000	RSDE1	RSDE2	RSDE/2A	DX4000	DX5000	CX2000	CX2500	CX3000
Bandsaws Circular saws Sanders Intermittent usage	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended			
Bandsaws Circular saws Sanders Heavy usage					✓ Recommended	✓ Recommended			
Planer Thicknessers Spindle Moulders Universals Intermittent usage	✓ Recommended	✓ Recommended			✓ Can be used	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended
Planer Thicknessers Spindle Moulders Universals Heavy usage					✓ Can be used	✓ Recommended		✓ Recommended	✓ Recommended
Dust Extraction System Intermittent usage					✓ Can be used	✓ Recommended			

15. Troubleshooting



Warning: For your own safety, always turn off and unplug the machine before carrying out any troubleshooting.

Problem	Cause	Solution
Machine will not start, develop full power or stalls.	<ol style="list-style-type: none"> 1. Machine not plugged in. 2. Low voltage. 3. Loose connection. 4. Circuit overloaded with electrical appliances. 5. Circuit too long or undersized wires. 6. Circuit breaker does not have sufficient capacity. 7. Drive belt tension too high. 8. Extension cord is too long. 9. Worn motor. 10. Motor not cooling sufficiently. 	<ol style="list-style-type: none"> 1. Plug the machine in. 2. Check power supply to the machine. 3. Check all external connections. 4. Decrease the load on the circuit. 5. Reduce the length of the wire or use a suitable diameter of cable. 6. Have a qualified electrician install suitable circuit breaker. 7. Reduce belt tension. 8. Reduce the length of the extension cord. 9. Replace motor. 10. Clean the motor to increase airflow or reduce operational periods.
Motor overheats.	<ol style="list-style-type: none"> 1. Motor overloaded. 2. Motor not cooling sufficiently. 	<ol style="list-style-type: none"> 1. Reduce load on the motor. 2. Clean the motor to increase airflow or reduce operational periods.
Spindle stalls or will not turn.	<ol style="list-style-type: none"> 1. Excessive depth of cut. 2. Loose or broken belt. 3. Worn spindle bearings. 	<ol style="list-style-type: none"> 1. Reduce cutting depth. 2. Adjust belt tension or replace drive belt. 3. Replace bearings.
Tailstock moves when applying pressure	<ol style="list-style-type: none"> 1. Excessive pressure is being applied by the tailstock to the workpiece. 2. Tailstock is not secured in place. 3. Lathe bed and tailstock mating surfaces are dirty. 	<ol style="list-style-type: none"> 1. Apply only sufficient force with the tailstock to hold the timber securely between centres. 2. Tighten tailstock locking lever. 3. Remove and clean the tailstock and lathe bed.
Tailstock or tool rest holder will not lock in place securely.	<ol style="list-style-type: none"> 1. The clamp is set incorrectly. 	<ol style="list-style-type: none"> 1. Adjust the clamp as shown in the Maintenance chapter of the manual.
Turning tool digs into the timber or grabs it.	<ol style="list-style-type: none"> 1. The turning tool is blunt. 2. The tool rest is set to low. 3. The tool rest is too far from the timber. 4. The wrong turning tool is being used. 	<ol style="list-style-type: none"> 1. Sharpen the turning tool. 2. Set the tool rest to the correct height. 3. Move the tool rest closer to the timber. 4. Use the correct turning tool.
Excessive motor noise.	<ol style="list-style-type: none"> 1. Faulty motor. 2. Pulley blind set screws are loose. 	<ol style="list-style-type: none"> 1. Replace motor. 2. Tighten blind set screws.
Excessive vibration.	<ol style="list-style-type: none"> 1. Work piece is excessively out of balance. 2. Worn spindle bearings. 3. Worn drive belt. 4. Motor mount bolts or handles are loose. 5. Lathe is on an uneven surface. 	<ol style="list-style-type: none"> 1. Balance the work piece as best as possible before mounting to the lathe. 2. Replace spindle bearings. 3. Replace the drive belt. 4. Tighten the bolts and handles. 5. Ensure the lathe is stable and level.

16. Electrical Connection and Wiring Diagram

Machines supplied for use in the UK are fitted with a 3 pin plug conforming to BS1363, fitted with a fuse conforming to BS1362 and appropriate to the current rating of the machine.

Machines supplied for use in other countries within the European Union are fitted with a 2 pin Schuko plug conforming to CEE 7/7.

Machines supplied for use in Australia and New Zealand are fitted with a 3 pin plug conforming to AS/NZS3112.

In all cases, if the original plug or connector has to be replaced for any reason, the wires within the mains power cable are colour coded as follows:

230 V (Single Phase)

Brown:	Live (L)
Blue:	Neutral (N)
Green and Yellow:	Earth (E)

The wire coloured brown must always be connected to the terminal marked 'L' or coloured red.

The wire coloured blue must always be connected to the terminal marked 'N' or coloured black.

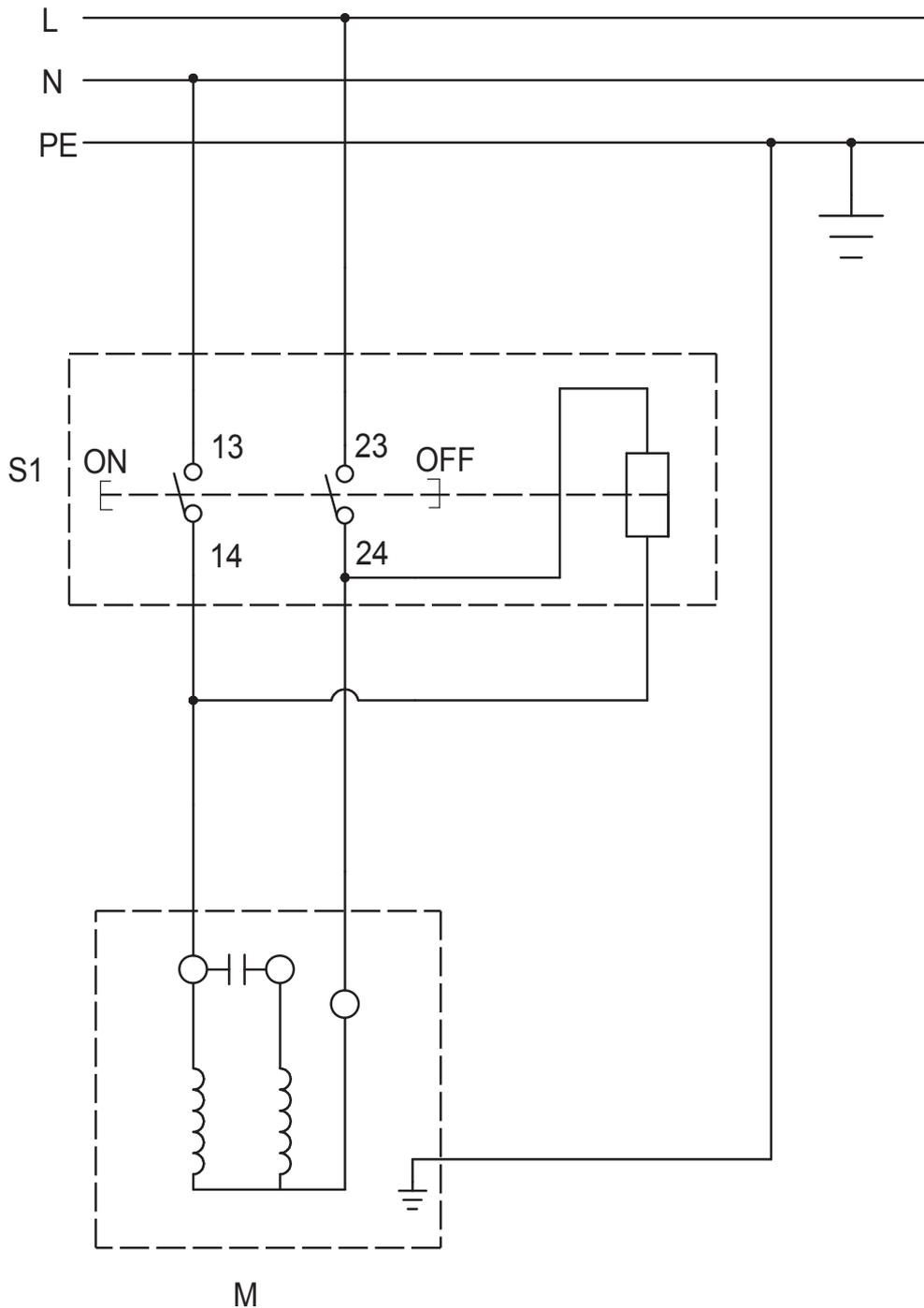
The wire coloured green and yellow must always be connected to the terminal marked 'E' or with the earth symbol:



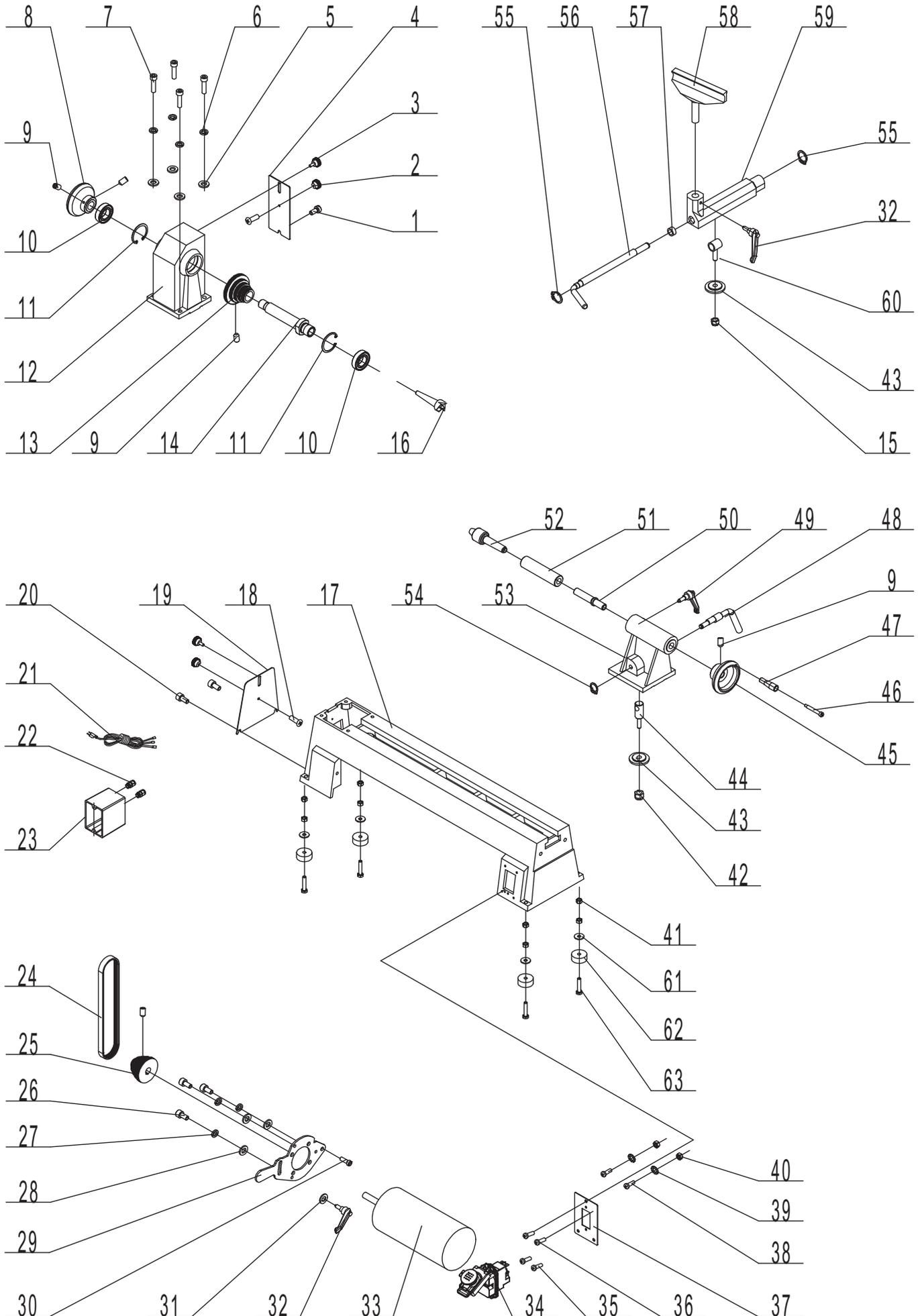
or coloured green / green and yellow.

It is important that the machine is effectively earthed.

Replacement of a faulty power cord must be carried out by Record Power or an approved qualified electrician.



17. Parts Diagram and List



17. Parts Diagram and List

No.	Description	Quantity	No.	Description	Quantity
1	Screw M5 x 10 mm	1	32	Locking handle	2
2	Headstock cover handle	2	33	Motor	1
3	Headstock cover retaining screw	2	34	Switch	1
4	Headstock cover	1	35	Screw 4 x 30 mm	2
5	Washer 6 mm	4	36	Screw 4 x 25 mm	2
6	Spring washer 6 mm	4	37	Plate	1
7	Hex. socket head screw M6 x 25 mm	4	38	Screw 5 x 25 mm	2
8	Hand wheel	1	39	Washer 5 mm	2
9	Blind set screw M6 x 10 mm	5	40	Nut 5 mm	2
10	Ball bearing 6005-2RS	2	41	Nut 8 mm	8
11	Retaining circlip 47	2	42	Hex. nut 8 mm	1
12	Headstock	1	43	Tailstock clamp	2
13	Spindle pulley	1	44	Threaded shaft	1
14	Headstock spindle	1	45	Hand wheel	1
15	Hex. nut 10	1	46	Screw M6 x 50 mm	1
16	Drive centre	1	47	Hand wheel handle	1
17	Bed	1	48	Locking lever	1
18	Screw M5 x 10 mm	2	49	Locking handle	1
19	Motor pulley access hatch cover	1	50	Lead screw	1
20	Screw M5 x 10 mm	2	51	Tailstock barrel	1
21	Power cord	1	52	Revolving centre	1
22	Cable glands	2	53	Tailstock	1
23	Switch box	1	54	Retaining ring 10 mm	1
24	Drive belt 630 mm	1	55	Ring retaining 12 mm	2
25	Motor pulley	1	56	Locking lever	1
26	Hex. socket head screw M6 x16 mm	3	57	Cover	1
27	Spring washer 6 mm	3	58	Tool rest	1
28	Washer 6	3	59	Tool rest base	1
29	Motor plate	1	60	Threaded shaft and sleeve	1
30	Screw M8 x 12 mm	1	61	Large washer 8 mm	4
31	Large washer 8 mm	1			

EU Declaration of Conformity

Cert No: EU / DML250 / 1

Record Power Ltd, Centenary House, 11 Midland Way, Barlborough Links, Chesterfield, Derbyshire, S43 4XA, United Kingdom declares that the machinery described:-

1. Type: **10" 5 Speed Cast Iron Mini Lathe**
2. Model No: **DML250**
3. Serial No

Conforms with the following standards:

MACHINERY DIRECTIVE	2006/42EC
WEEE DIRECTIVE	2012/19/EU
RoHS DIRECTIVE	2011/65/EU
ELECTROMAGNETIC COMPATIBILITY DIRECTIVE	2014/35/EU EN 62841-1:2015 EN55014-1:2006+A1+A2 EN55014-2:2015 EN61000-3-2:2014 EN61000-3-3:2013

and conforms to the machinery example for which the
EC Type-Examination Certificate Nos. **AM 503433740001, AE 50354397**
At: TUV Rheinland LGA Products GmbH, Tillystrasse 2, 90431, Nürnberg, Germany

and complies with the relevant essential health and safety requirements.



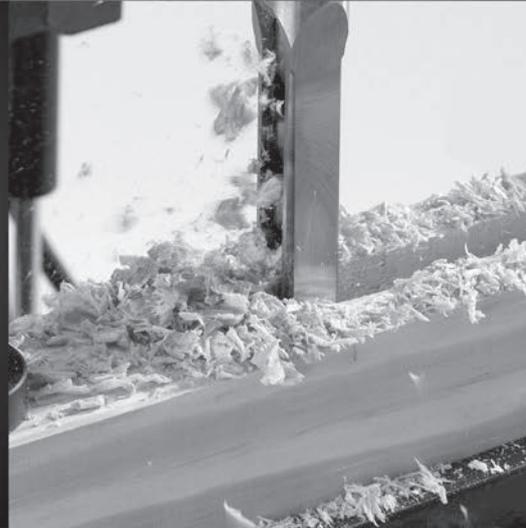
Signed.....Dated: **01/06/2016**

Andrew Greensted
Managing Director

Technical file held by Andrew Greensted, Record Power Ltd, Centenary House, 11 Midland Way, Barlborough Links, Chesterfield, Derbyshire, S43 4XA, United Kingdom



Over
100
 years
 Experience • Knowledge
 Support • Expertise



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 ESTABLISHED 1909®

Woodworking Machinery and Accessories

United Kingdom

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Eire

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