RECORD POWER
ESTABLISHED 1909®

Original Instructions

Pathfinder

Variable Speed Lathe

Version 3.2
January 2026

5 YEAR GUARANTEE

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.

Contents

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 Health and Safety Guidance

Ensure that you carefully read and fully understand the instructions in this manual before assembly, installation and use of this product. Keep these instructions in a safe place for future reference.

WARNING: for your own safety, do not attempt to operate this machine until it is completely assembled and installed according to these instructions.

WARNING: When using any machine, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

Safe Operation

1. Use Personal Protective Equipment (PPE)

- The operation of any machine can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Protective eyewear or other suitable eye protection or face shield should be always used. Everyday spectacles only have impact resistant lenses. They are not protective eyewear and do not give additional lateral protection.
- Use respiratory protective equipment (dust mask etc.) if the machining operation creates dust. Exposure to high levels of dust created by machining hardwoods, softwoods and man-made composite boards can result in serious health problems. Some imported hardwoods give off highly irritating dust, which can cause a burning sensation. The use of respiratory protective equipment should not be seen as an alternative to controlling the risk of exposure at source by using adequate dust extraction equipment.
- The use of ear plugs, or ear defenders is recommended when the machine is in use, particularly if the noise level exceeds 85 dB.
- Wear suitable protective gloves when handling cutting tools or blades. Gloves should NOT be worn when using the machine as they can be caught in moving parts of the machine.
- Non-slip safety footwear is recommended when using the machine and handling large work pieces.

2. Dress appropriately

- Do not wear loose clothing, neckties or jewellery; they can be caught in moving parts of the machine.
- Roll up long sleeves above the elbow.
- Wear protective hair covering to contain long hair.

3. Safety warnings

- Find and read any warning labels on the machine.
- It is important that any labels bearing health and safety warnings are not removed, defaced or covered. Replacement labels can be obtained by contacting our Customer Service Department.

4. Familiarise yourself with the machine

- If you are not thoroughly familiar with the operation of this machine, obtain advice from your supervisor, instructor, or other qualified person or contact your retailer for information on training courses. Do not use this machine until adequate training has been undertaken.

5. Take care when moving or positioning the machine

- Some machines can be very heavy. Ensure the floor of the area in which the machine is to be used can support the machine.
- The machine and its various components can be heavy. Always adopt a safe lifting technique and seek assistance when lifting heavy components. In some cases, it may be necessary to use mechanical handling equipment to position the machine within the work area.
- Some machines have optional wheel kits available to allow them to be manoeuvred around the workshop as required. Care should be taken to install these according to the instructions provided.
- Due to the nature of the design of some machines the centre of gravity will be high making them unstable when moved. Extreme care should be taken when moving any machine.
- If transportation of the machine is required then all precautions relating to the installation and handling of the machine apply. In addition, ensure that any vehicles or manual handling equipment used for transportation are of adequate specification.

6. The machine should always be level and stable

- When using a leg stand or cabinet base that is designed to be fitted to the machine, always ensure that it is securely fastened to the machine using the fixings provided.
- If the machine is suitable to be used on a workbench, ensure that the workbench is well constructed and capable of withstanding the weight of the machine. The machine should always be securely fastened to the workbench with appropriate fixings.
- Where possible, floor standing machines should always be secured to the floor with fixings appropriate to the structure of the floor.
- The floor surface should be sound and level. All the feet of the machine should contact the floor surface. If they do not, either re-locate the machine to a more suitable position or use packing shims between the feet and the floor surface to ensure the machine is stable.

7. Remove adjusting keys and wrenches

- Ensure that all adjusting wrenches and keys are removed before switching the machine 'ON'. There is a risk of severe personal injury or damage to the machine from airborne objects.

8. Before switching the machine 'ON'

- Clear the machine table of all objects (tools, scrap pieces etc.)
- Make sure there is no debris between the work piece and the table / work support.
- Ensure that the work piece is not pressed against or touching the saw blade or cutting tool.
- Check all clamps, work holding devices and fences to ensure that they are secure and cannot move during machining operations.
- Plan the way that you will hold and feed the work piece for the entire machining operation.

9. Whilst machining

- Before starting work, watch the machine while it runs. If it makes an unfamiliar noise or vibrates excessively, switch the machine 'OFF' immediately and disconnect it from the power supply. Do not restart until finding and correcting the source of the problem.

10. Keep the work area clear

- Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine and space for auxiliary stands and/or worktables. Also consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely operate your machines in any foreseeable operation.
- Cluttered work areas and benches create the risk of accidents. Keep benches clear and tidy away tools that are not in use.
- Ensure that the floor area is kept clean and clear of any dust and debris that may create trip or slip hazards.

11. Consider the work area environment

- Do not expose the machine to rain or damp conditions.
- Keep the work area well-lit and ensure that there is artificial lighting available when there is insufficient natural light to effectively light the work area. Lighting should be bright enough to eliminate shadow and prevent eye strain.
- Do not use the machine in explosive environments e.g. in the presence of flammable liquids, gases or dust.
- The presence of high levels of dust created by machining wood can present a risk of fire or explosion. Always use dust extraction equipment to minimise the risk.

2. General Health and Safety Guidance

12. Keep other persons away (and pets)
- The machine is designed to be used by one person only.
- Do not let persons, especially children, touch the machine or extension cable (if used) and keep visitors away from the work area.
- Never leave the machine running unattended. Turn the power supply off and do not leave the machine unattended until it comes to a complete stop.
- If the work area is to be left unattended, all machinery should be switched 'OFF' and isolated from the mains power supply.

13. Store machines safely when not in use
- When not in use, machines should be stored in a dry place, out of reach of children. Do not allow persons unfamiliar with these instructions or with the machine to operate it.

14. Do not overreach
- Choose a working position that allows your body to remain balanced and feed the work piece into the machine without overreaching.
- Always keep proper footing and balance.

15. Electrical supply
- Electrical circuits should be dedicated to each machine or large enough to handle combined motor amp loads. Power outlets should be located near each machine so that power or extension cables are not obstructing high-traffic areas. Observe local electrical guidelines for proper installation of new lighting, power outlets, or circuits.
- The machine must be connected to an earthed power supply.
- The power supply must be equipped with a circuit breaker that provides short circuit, overload and earth leakage protection.
- The voltage of the machine must correspond to the voltage of the mains power supply.
- The mains plug fitted to the machine should always match the power outlet. Do not modify the plug in any way. If a replacement plug is required, it should be fitted by a competent person and of the correct type and rating for the machine.
- If you are unsure about any electrical connections always consult a qualified electrician.

16. Avoid unintentional starting of the machine
- Most machines are fitted with a no-volt release (NVR) switch to prevent unintentional starting. If in doubt always ensure the machine switch is in the 'OFF' position before connecting it to the power supply. This means the machine will not automatically start up after a power cut or switching one of the power supplies, unless you first reset the start switch.

17. Outdoor use
- Your machine should not be used outdoors.

18. Extension cables
- Whenever possible, the use of extension cables is not recommended. If the use of an extension cable is unavoidable, then it should have a minimum core cross section of 2.5mm^2 and limited to a maximum length of 3 metres.
- Extension cables should be routed away from the direct working area to prevent a trip hazard.

19. Guard against electric shock
- Avoid body contact with earthed or grounded surfaces such as pipes and radiators. There is an increased risk of electric shock if your body is earthed or grounded.

20. Always work within the machine's intended capacities
- Operator safety and machine performance are seriously adversely affected if attempts to make the machine perform beyond its limits are made.

21. Do not abuse the power cable
- Never pull the power cable to disconnect it from the power socket. Always use the plug.
- Keep the power cable away from heat, oil and sharp edges.
- Do not use the power cable for carrying or moving the machine.

22. Secure the work piece
- Ensure that the work piece is securely held before starting to machine it.
- When working within 300 mm of the machining area, always use a push stick to feed the work piece into the blade or cutting tool. The push stick should have a minimum length of 400 mm. If the push stick becomes damaged, replace it immediately.
- Use extra supports (roller support stands etc.) for any work pieces large enough to tip when not held down to the tabletop.
- Do not use another person as a substitute for a table extension, or as additional support for a work piece that is longer or wider than the basic table, or to help feed, support, or pull the work piece.
- Do not attempt to machine more than one work piece at a time.
- When feeding the work piece towards the blade or cutting tool never position your hands in direct line of the cutting path. Avoid awkward operations and hand positions where a sudden slip could cause your hand or fingers to move into the machining area.

23. Stay alert
- Safety is always a combination of operator common sense and alertness when the machine is being used.
- Use all machines with extreme care and do not use the machine when you are tired or under the influence of drugs, alcohol or medication.

24. Use the correct tool for the job
- Do not use the machine for any purpose other than which it was designed.
- When selecting replacement cutting tools and blades, always ensure that they are designed to cut the material that you intend to use them for. If in any doubt seek further advice from the manufacturer.

25. Connect dust extraction equipment
- Always use dust extraction equipment. The dust extractor should be of suitable size and capacity for the machine that it is connected to and have a filtration level appropriate to the type of waste being collected. Refer to the relevant section of the manual for details of the specific dust extraction requirements for this machine.
- The dust extractor should be switched 'ON' before starting the machine that it is connected to. The dust extractor should be left running for 30 seconds after the last machining operation is complete to clear any residual waste from the machine.

26. Ensure that the machine is correctly guarded
- Never use the machine if any of the standard safety guards and equipment is removed or damaged.
- Some machines incorporate safety interlocks to prevent the machine from being used without the guards in place. Never attempt to bypass or modify the interlocks to allow the machine to be used without the guards in place.
- Remember always to switch off and unplug the machine from the power supply before carrying out any setting up or maintenance operations.

27. Maintain your machine with care
- This manual gives clear instructions on installation, set up and operation of the machine and details any routine and preventative maintenance that should be performed periodically by the user.
- Follow any instructions for the maintenance of accessories and consumables.
- Do not use compressed air to clean the machine. Always use a brush to dislodge dust in places that are awkward to reach and a dust extractor to collect the waste.
- Inspect electric cables periodically and, if damaged, have them replaced by an authorised service facility or qualified electrician.
- Inspect extension cables (if used) periodically and replace if damaged.

2. General Health and Safety Guidance

28. Keep cutting tools sharp and clean

- Correctly maintained cutting tools are easier to control and less likely to bind.
- Cutting tools and blades can become hot during use. Take extreme care when handling them and always allow them to cool before changing, adjusting or sharpening them.

29. Disconnect the machine from the power supply

- When not in use, before servicing, changing blades etc. always disconnect the machine from the power supply.

30. Check for damaged parts

- Before each use of the machine, it should be carefully checked to determine that it will operate properly and perform its intended function.
- Check for alignment of moving parts, binding of moving parts, breakage of parts and any other conditions that may affect the operation of the machine.
- A guard or other part that is damaged should be properly repaired or replaced by a qualified person unless otherwise indicated in this instruction manual.
- Do not use the machine if the switch does not turn the machine 'ON' and 'OFF'.
- Have defective switches replaced by a qualified person.

31. Warning!

- The use of any accessory or attachment, other than those recommended in this instruction manual, or recommended by our Company may present a risk of personal injury or damage to the machine and invalidation of the warranty.

32. Have your machine repaired by a qualified person

- This machine complies with the relevant safety rules and standards appropriate to its type when used in accordance with these instructions and with all the standard safety guards and equipment in place.
  Only qualified persons using original spare parts should carry out repairs. Failure to do this may result in considerable danger to the user and invalidation of warranty.

33. Caution! Motor may become hot during use

- It is normal for motors on some machines to become hot to the touch during use. Avoid touching the motor directly when in use.

3. Additional Health and Safety Guidance for Woodturning Lathes

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 contact 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.
- Always keep firm control of the turning tool. 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 expected 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. Health and Safety

This machine falls under the scope of the 'Health and Safety at Work 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 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 purchasethe 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 or the Authorised Dealer will repair or replace free of charge any parts which are proven 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 or the 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 or the Authorised Dealer, you return the Product, at your own cost, to Record Power's premises or other approved premises such as those of the 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 Dealer)

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 an Authorised Dealer, 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. 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 be sent with proof of the purchase date (preferably a receipt) to Record Power. 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 by 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

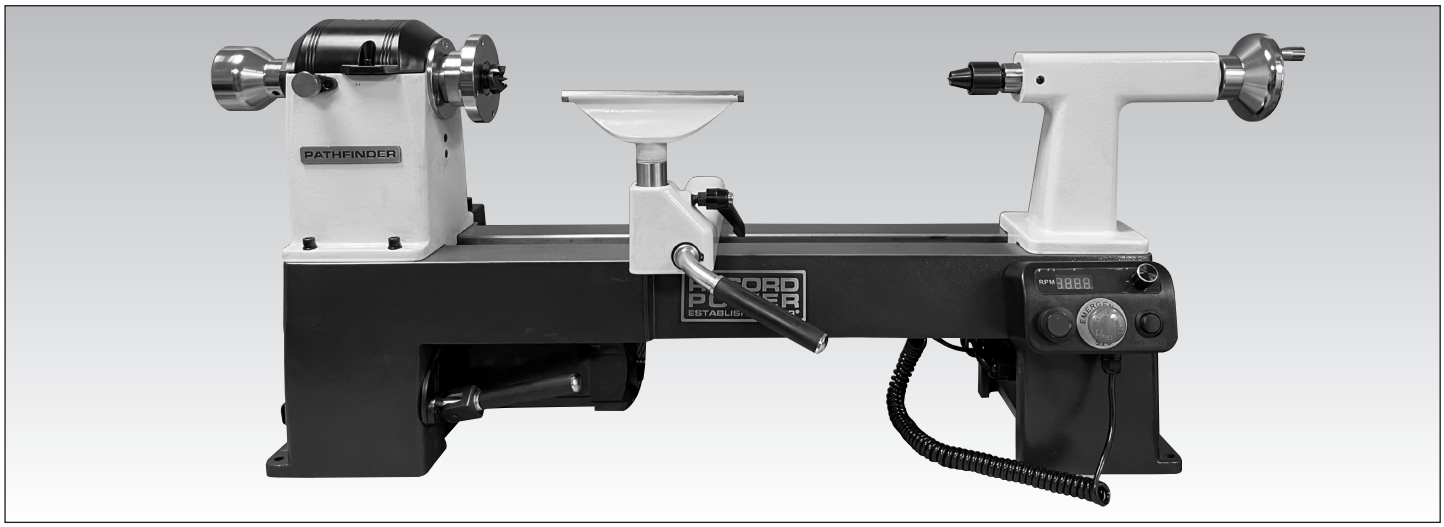
This Guarantee applies to all Products purchased from an Authorised Dealer of Record Power. Terms of Guarantee may vary in other countries – please check with the Authorised Dealer in your country.

5. Specifications

Key Specifications

Feature	Specification
Motor Power (Input / Output)	P1: 1 HP / P2: 3/4 HP
Swing Over Bed	305 mm
Swing Over Tool-rest Base	235 mm
Distance Between Centres	406 mm
Electronic Variable Speed	250–3200 rpm
Speed Ranges	250–850 rpm / 430–1450 rpm / 950–3200 rpm
Spindle Rotation	Forward & Reverse
Spindle Thread	M33
Morse Taper	MT2
Tailstock Ram Travel	90 mm
Indexing Positions	24
Tool-post Diameter	25.4 mm
Weight	45.5 kg

6. Contents of the Package



Item	Description	Quantity	Item	Description	Quantity
1	Lathe with faceplate, tool rest holder and tailstock installed	1	**7**	Revolving centre	1
2	Tool rest	1	**8**	4 prong drive centre	1
3	Spindle wrench	1	**9**	Tool holder	1
4	Faceplate wrench	1	**10**	3 mm hex wrench	1
5	M6 X 12MM Phillips head screws & washers:		**11**	4 mm hex wrench	1
	for fixing item no 9 to lathe.	2	**12**	5 mm hex wrench	1
6	Drive centre knockout bar	1	**13**	Knockout bar	1

Unpacking and Cleaning

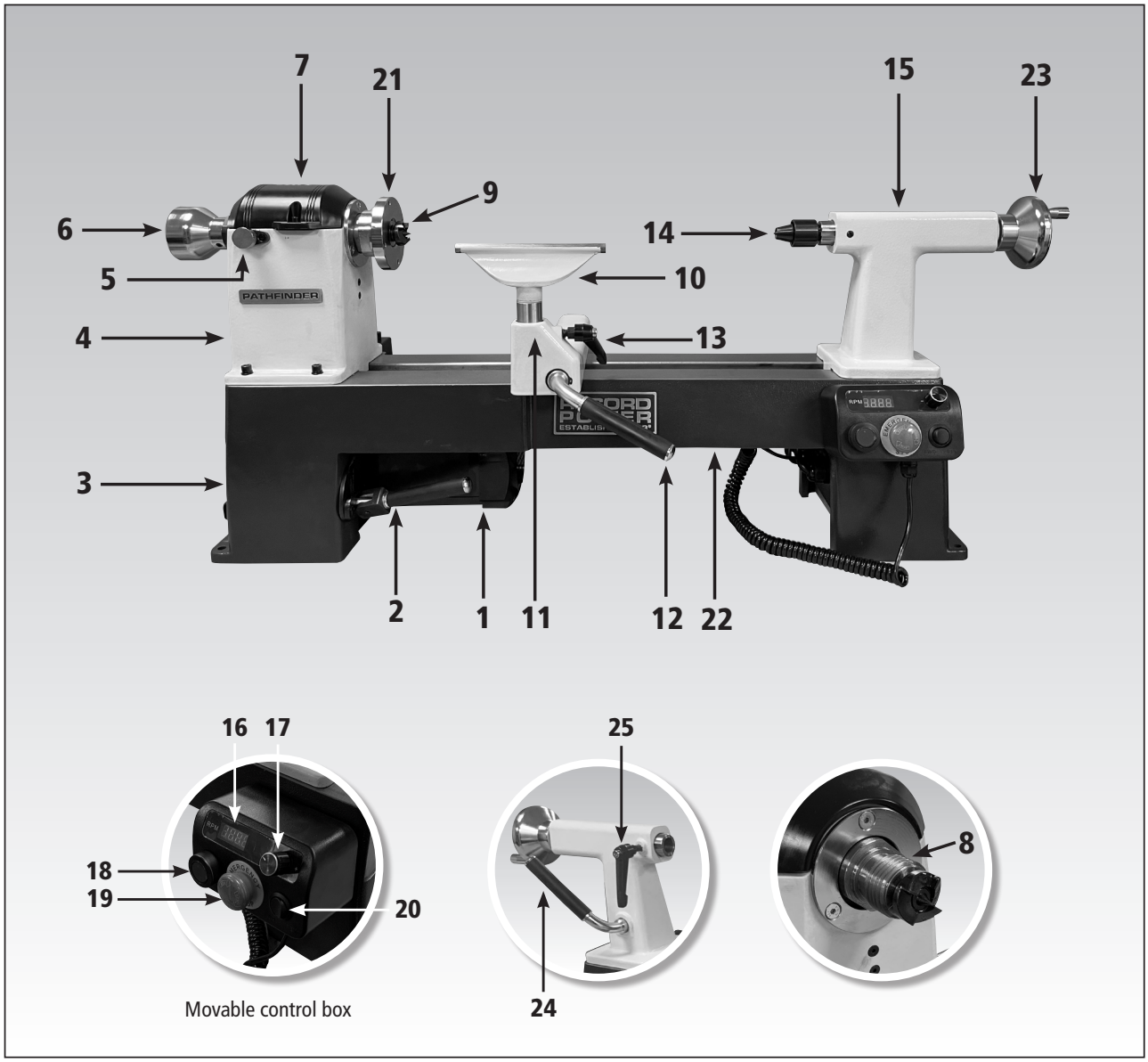
1. Carefully lift the lathe from the carton and check that all the components and contents have been included. Place parts on a protected surface.
2. Clean all rust protected surfaces with wet wipes and tissue roll and then apply a microcrystalline type wax and nothing oil based for dust to adhere to.
3. Set packing materials and shipping carton aside. Do not discard until the machine has been set up and is running properly.

Tools Required for Assembly

(Not Supplied)

Phillips screwdriver

7. Getting to Know Your Lathe



1 Motor
2 Motor positioning lever
3 Motor pulley access hatch
4 Headstock
5 Indexing lock
6 Hand wheel
7 Headstock cover
8 Spindle
9 4 prong drive centre
10 Tool rest
11 Tool rest holder
12 Tool rest holder quick release / locking lever
13 Tool rest locking lever
14 Revolving centre
15 Tailstock
16 Digital spindle speed readout
17 Spindle speed control knob
18 On switch
19 Emergency stop switch
20 Forward / reverse switch
21 Faceplate
22 Lathe bed
23 Tailstock hand wheel
24 Tailstock quick release / locking lever
25 Tailstock spindle locking lever

10

8. Assembly

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

Installing the Tool Rest to the Tool Rest Holder
Fig 8.1 Loosen the locking lever and insert the tool rest into tool rest holder, adjust the height as required and tighten the locking lever. **Fig 8.2** tool rest installed as per image.

Fitting the Tool Holder to the Lathe Bed
On the rear of the lathe bed, below the headstock are 2 tapped holes for mounting the tool holder, **Fig 8.3**. Install the tool holder onto the lathe bed at the rear of the headstock with the two Phillips head screws and washers supplied, **Fig 8.4**. The washers should be placed on the inside surface of the tool holder as shown in **Fig 8.5**.

Fig 8.1

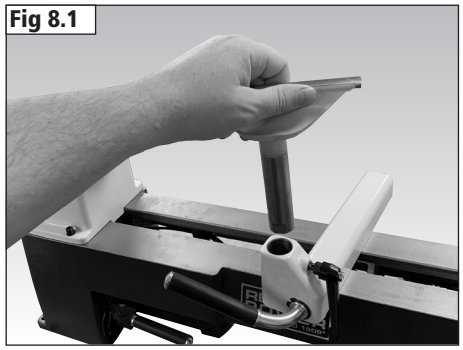


Fig 8.2

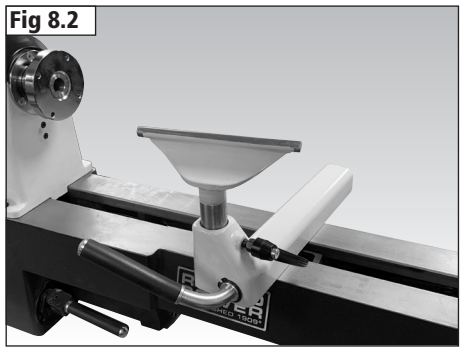


Fig 8.3

Fig 8.4

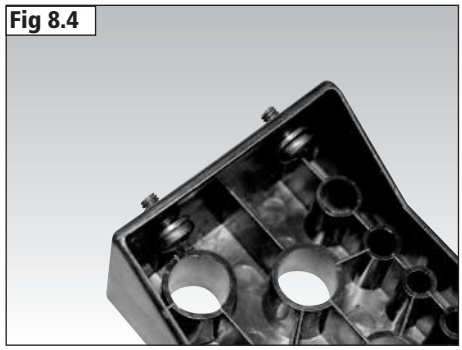
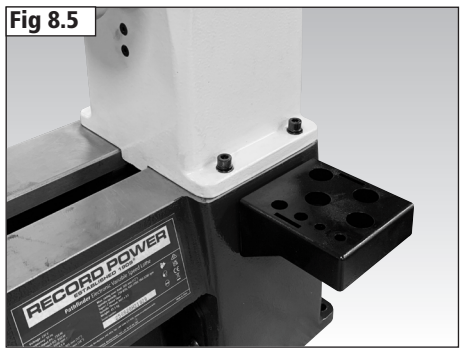


Fig 8.5



8. Assembly

Secure the Lathe to a solid work surface or suitable stand
Ensure the lathe stand is on a solid, level surface. Excessive vibration not only affects finish quality but increases operator fatigue. Heavy or bolted-down bases can improve stability and comfort, especially with larger or unbalanced blanks.

Ensure the surface your lathe is mounted to places the centre of the spindle approximately level with your elbow when standing comfortably. Benches that are too high may cause shoulder fatigue, while surfaces too low can lead to back strain. Choose a sturdy, non-flexing bench or consider a dedicated lathe stand with adjustable height.

Please note: Use of the DML305/A Leg Stand is recommended.
Four mounting holes are located at the base of the lathe (**Fig 8.6 & Fig 8.7**). 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 8.9**.

Fig 8.6

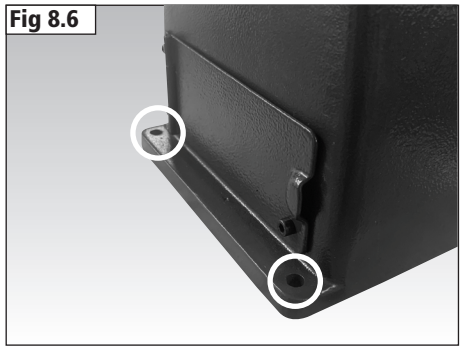


Fig 8.7

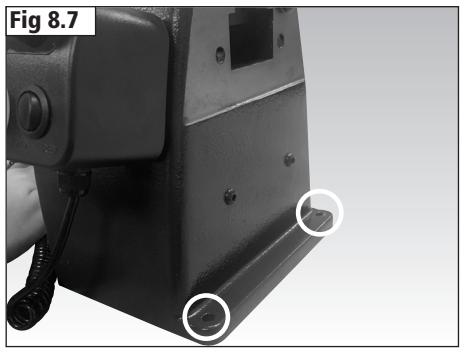
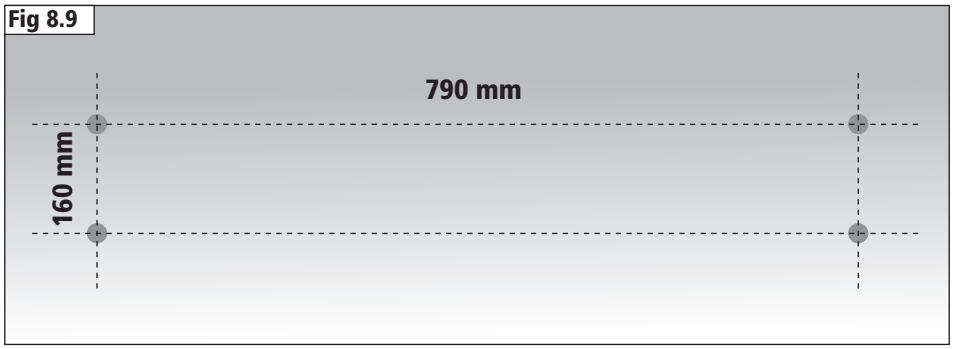


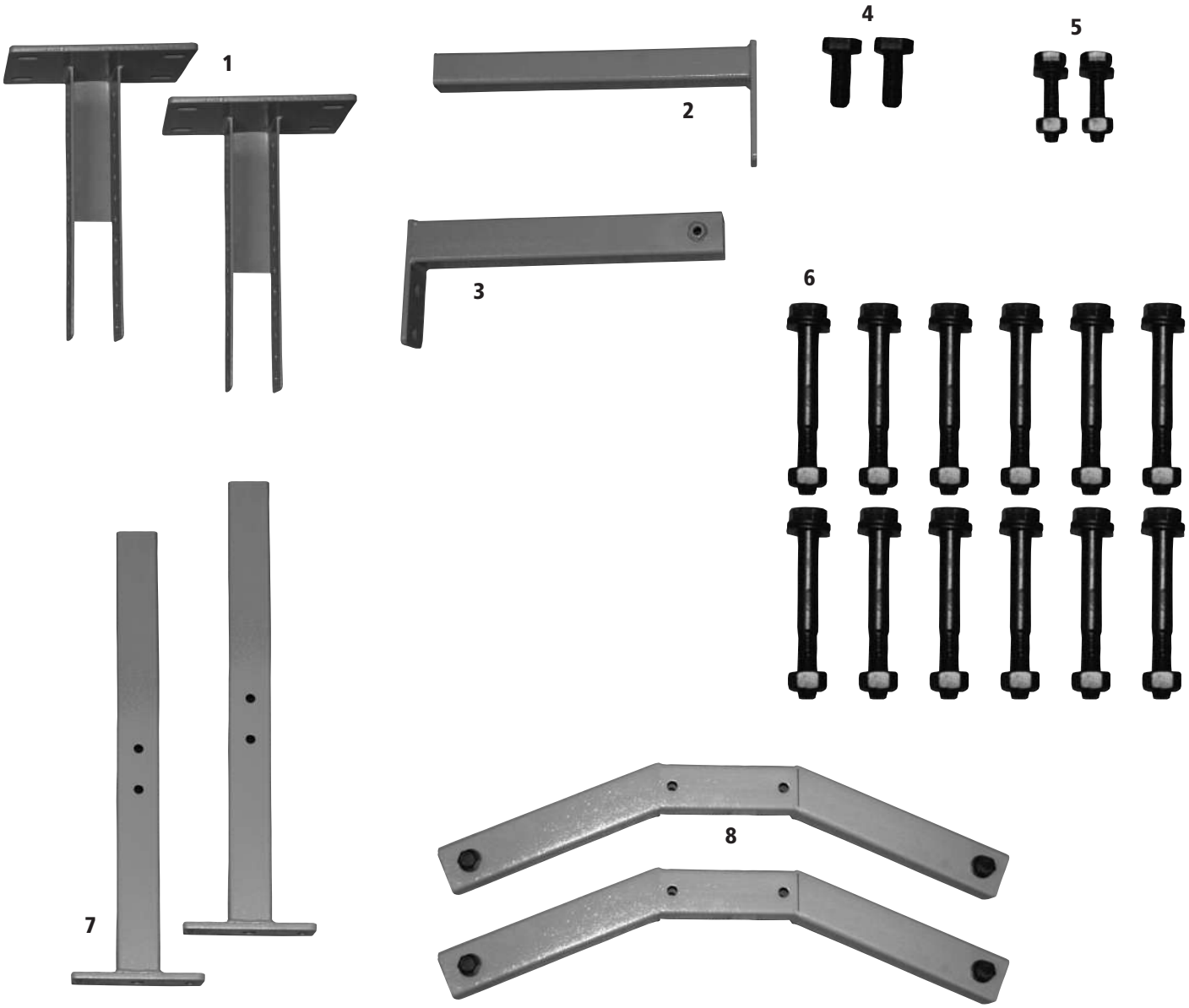
Fig 8.8

Fig 8.9



9.1 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

9.1 Assembly of the Optional DML305/A Leg Stand

Using a 16 mm wrench (not supplied) attach the upright column to the base using 2off 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, making sure that the overhang of the plate on top of the plinth is facing towards the inside of the leg stand. Also ensure that there is at least 1 hole space between the 2 bolts and that both bolts pass through the upright column. **Fig 9.2**. 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 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 9.3**.

To complete assembly of the leg stand, insert the male cross brace into the female cross brace, ensuring that the distance from the outer edges of the tops of the plinths is approximately 945 mm. Using a 16 mm wrench (not supplied) hold in place with 2 M10 x 25 mm hex head screws, **Fig 9.4**.

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

Fig 9.1

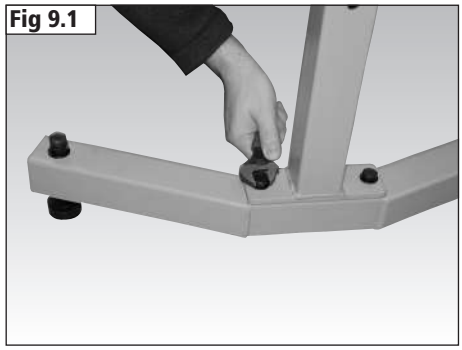


Fig 9.2

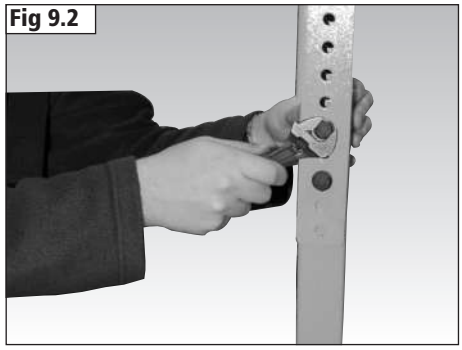


Fig 9.3

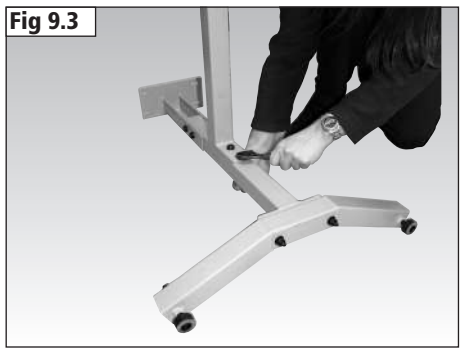
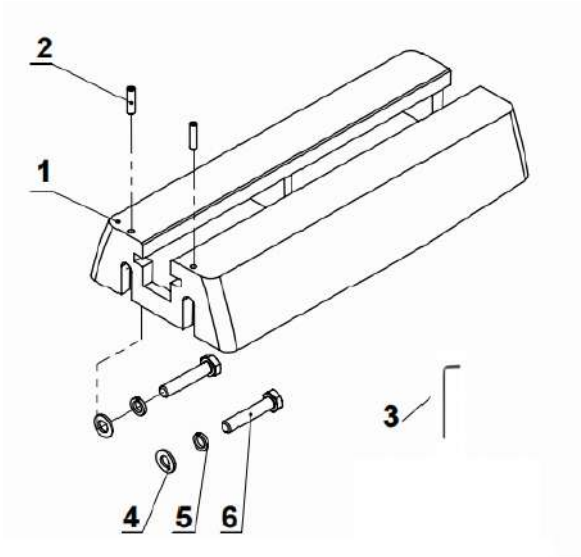


Fig 9.4

9.2 Assembly of the Optional Pathfinder Bed Extension

Contents of the Pathfinder Bed Extension package

Item	Description	Quantity
1	Bed extension	1
2	Set screw	2
3	Hex wrench 3mm	1
4	M10 washers	2
5	M10 spring washers	2
6	M10 x 35 mm bolts	2



First remove the M8 button head socket screw. Placing a M10 spring washer followed by a M10 washer onto a M10 x 35 mm bolt screw into the hole on the end of the Lathe bed, leaving approximately 20 mm of the M10 x 35 mm bolt exposed, **Fig 9.5**. This will allow the bed extension to be hung onto the bolts safely. Place the bed extension onto the exposed bolts and tighten them enough to hold the bed extension in place, **Fig. 9.6.**

Do not fully tighten at this stage, as adjustment will be required to make the bed surfaces flush. **Adjustment of the Bed extension** Using a 3mm hex wrench Tighten the set screws into the bed extensions top face. These will lift the bed and hold the beds position when the M10 x 35mm bolts are tightened **Fig. 9.7**

To check alignment, run the tailstock between the original bed and the extension ensuring this runs smoothly. If further adjustment is needed, loosen M10 x 35mm bolts slightly and use a soft mallet to gently tap the extension into position without damaging the lathe or the extension **Fig. 9.8**. Once in the correct position and the tailstock runs across them smoothly, fully tighten the M10 x 35mm bolts and check the alignment with the tailstock again.

Fig 9.5

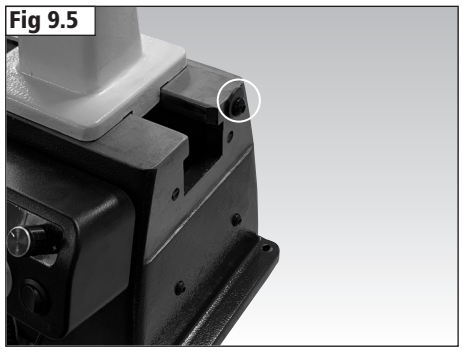


Fig 9.6

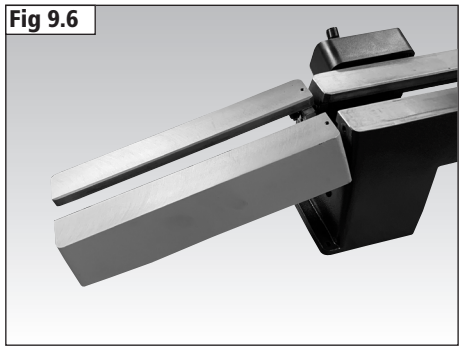


Fig 9.7

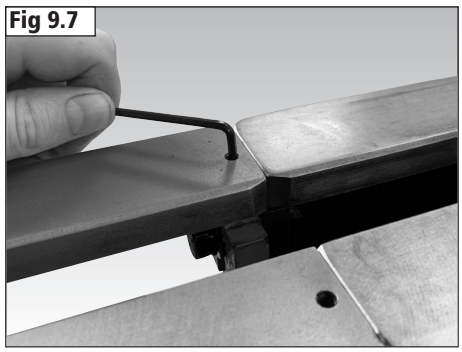
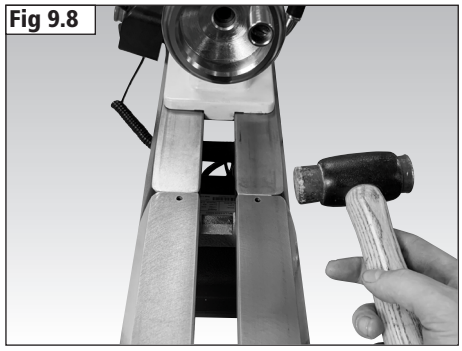


Fig 9.8



10. 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.

First remove the faceplate from the spindle. Using the supplied Spindle wrench, to hold the spindle in place, place the use the faceplate wrench on the flat areas of the faceplate and loosen as shown in **Fig 10.1** by turning in opposing direction (the faceplate in an anticlockwise direction), the faceplate should loosen and then can be removed from the spindle. Insert the drive centres morse taper into the headstock spindle, **Fig 10.2**.

Removing the 4 Prong Drive Centre from the Headstock

The knockout bar is used to remove the drive centre from the headstock spindle. The drive centre knockout bar is placed inside the shaft of the drive centre as shown in **Fig 10.3** before inserting the knockout bar into the hole positioned centrally in the hand wheel, at the opposite side of the headstock from the drive centre. Using the knockout bar, give the drive centre a sharp knock to dislodge it, **Fig 10.4**.

The drive centre knockout bar must only be fitted inside the shaft of the drive centre when removing it. Do not place it inside the drive centre shaft during operation as it will rattle and may work loose from the lathe.

Fig 10.1

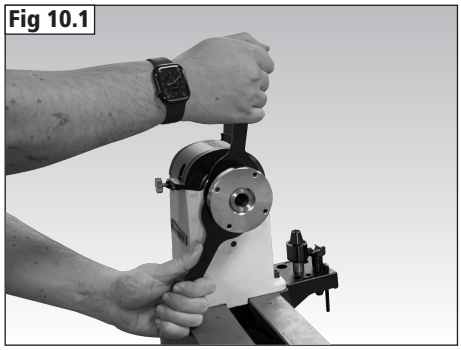


Fig 10.2

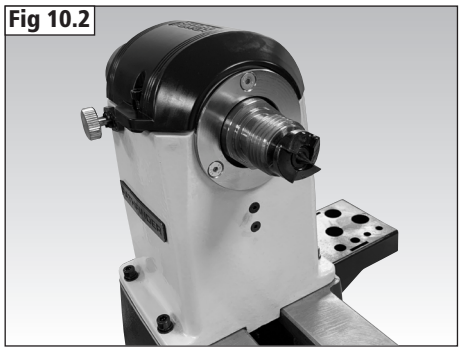


Fig 10.3

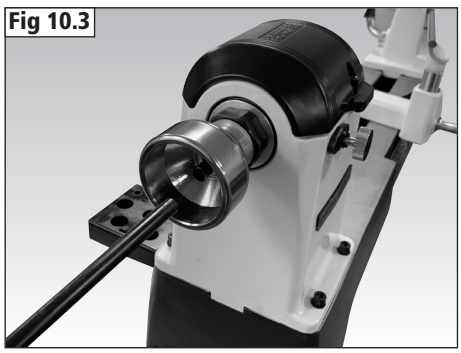
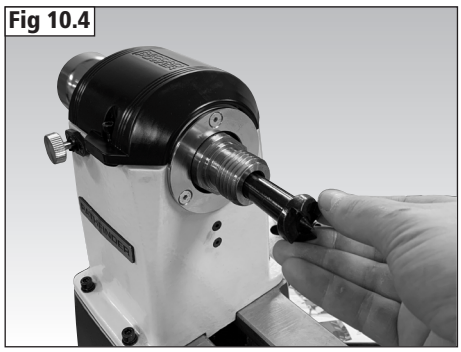


Fig 10.4



10. Operation

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.

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. First ensure the tailstock spindle locking lever is loosened then insert the revolving centre into the tailstock spindle, **Fig 10.5**.

Removing the Revolving centre from the Tailstock.
To remove the revolving centre from the tailstock spindle, loosen the tailstocks spindle locking lever **Fig 10.6**. and wind the tail stock all the way back. The revolving centre will push off the morse taper and release **Fig 10.7.** Then grab and remove by hand.

If this is a shorter morse taper and becomes stuck, insert the knockout bar into the hole in the centre of the tailstocks hand wheel and give the revolving centre a sharp knock to dislodge from the tailstock.

Adjusting the Tool Rest
To move the tool rest across the lathe bed, loosen the tool rest holder locking lever by turning in an anticlockwise direction, slide the tool rest holder to the desired position and tighten the locking lever in a clockwise direction. To adjust the height of the tool rest, loosen the tool rest locking lever, position as required and re-tighten, **Fig 10.8**.

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 10.9.1**. To adjust the tailstock spindle position, loosen the tailstock spindle locking lever (**Fig 10.9.2**) and turn the hand wheel. When the tailstock spindle is in the desired position, re-tighten the locking lever.

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.

Fig 10.5

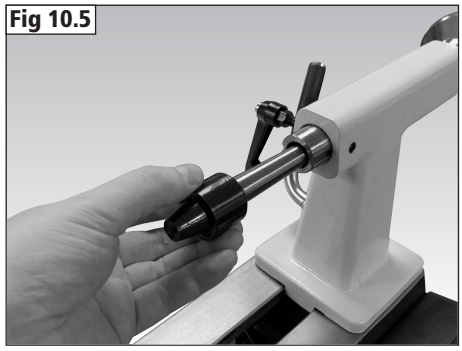


Fig 10.6

Fig 10.7

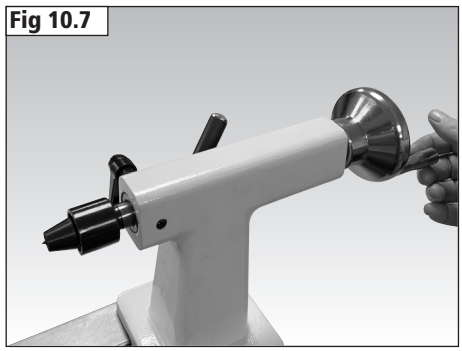
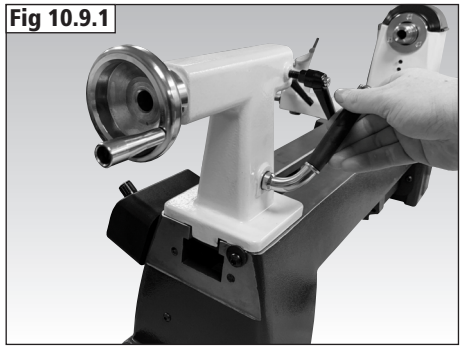


Fig 10.8

Fig 10.9.2

Fig 10.9.1



10. Operation

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.

Changing the Spindle Speed

The "Pathfinder" features a 3-step pulley system. The drive belt should be positioned on the corresponding pulleys as shown in **Fig 10.10.** to achieve the speed range required.

To access the spindle pulley, remove the hex head socket screw from the front of the headstock cover using a 4 mm hex wrench, **Fig 10.11**. To access the motor pulley, remove the hex head socket screw from the motor pulley access hatch and open the door, **Fig 10.12**. Loosen the motor securing lever and raise the motor to its highest position using the motor positioning lever, **Fig 10.13**, 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 10.14** and **10.15**.

Fig 10.10

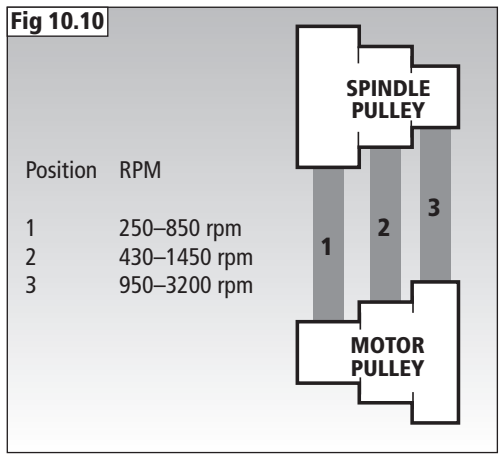


Fig 10.11

Fig 10.12

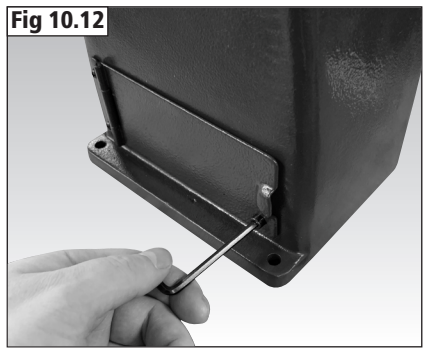


Fig 10.13

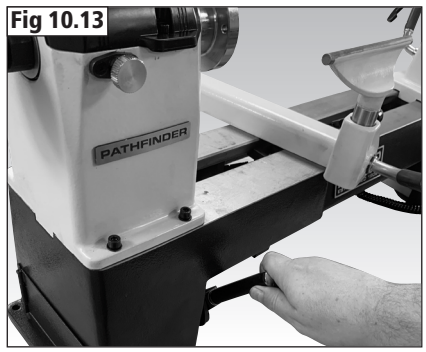


Fig 10.15

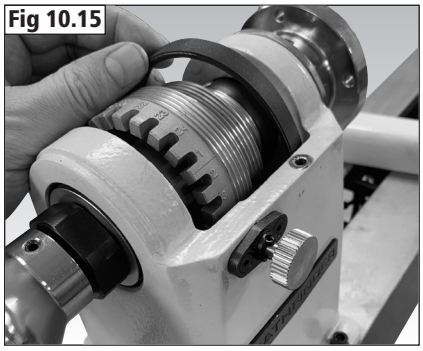


Fig 10.14

10. Operation

The indexing system must only be used when the lathe is stationary, and the power is turned off.

Ensure the V grooves of the drive belt are positioned in the grooves of the pulleys as shown in **Fig 10.16.** 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, close the headstock cover and close the motor pulley access hatch cover.

Indexing Lock
Indexing is a useful feature of the "Pathfinder" lathe, allowing accurate pattern work on projects such as straight fluting, grooving, drilling, lay out and more. The 24-position indexing lock system is located inside the headstock as shown in **Fig 10.17.**

The indexing holes are spread evenly around the circumference of the spindle pulley edge in 15º increments. The spring-loaded locking pin is engaged by pulling the knob outwards and twisting it until
the roll pins are at 90º to the grooves in the mounting plate as shown in **Fig 10.18**, and then released to allow the locking pin to locate inside one of the indexing holes. To disengage, lift the lock knob outwards, twist until the roll pins are parallel to the grooves and release, **Fig 10.19.**

Please note: The indexing system must not be used as a method of holding the spindle while removing accessories such as face plates, chucks etc. Damage caused to the machine by doing so is not covered by the warranty.

Always disengage the locking pin before turning the machine on. Damage caused to the machine by running it with the indexing pin engaged is not covered by the warranty.

Fig 10.16

Fig 10.17

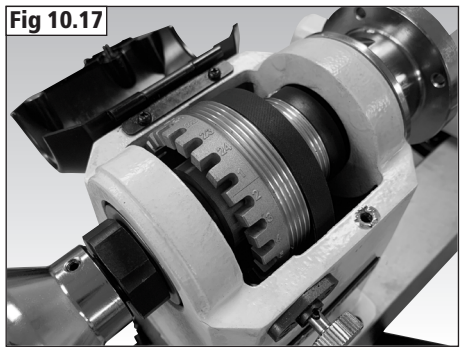


Fig 10.18

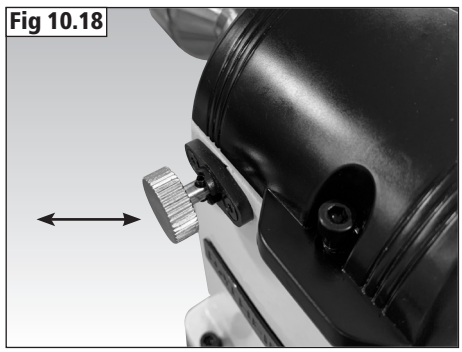
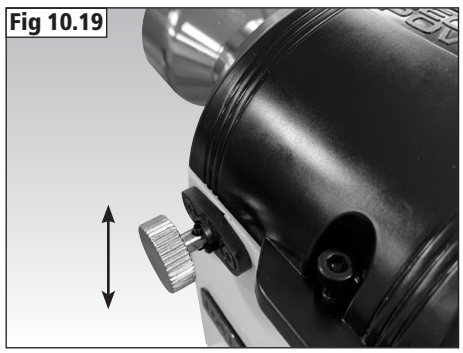


Fig 10.19



Spindle Indexing Reference Chart
The chart opposite gives a useful reference guide to basic indexing, showing the standard 8 divisions of the indexing system, the angle between positions and the spindle index numbers to use.

Number of Index Positions	Angle Between Positions	Spindle Index Numbers
1	360º	1
2	180º	1, 13
3	120º	1, 9, 17
4	90º	1, 7, 13, 19
6	60º	1, 5, 9, 13, 17, 21
8	45º	1, 4, 7, 10, 13, 16, 19, 22
12	30º	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23
24	15º	1 - 24

10. Operation

Operating the Lathe

1 To turn the lathe on, press the green switch on the control panel situated on the lathe Control-Box.

2 To stop the machine, press the e-stop button on the Control-Box

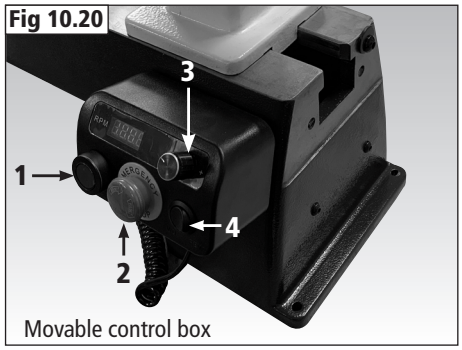
3 To adjust the speed, use the speed control dial on the Control-Box

4 The lathe can be used in forward or reverse. Use the directional switch to control the direction of the lathe. As shown in **Fig 10.20**

FWD - This is the conventional rotational direction of the lathe spindle and will turn the spindle anticlockwise when viewing it directly from its front.

REV - Is the opposite to the conventional rotational direction of the lathe spindle and will turn the spindle clockwise when viewing it directly from its front.

Fig 10.20



Movable control box

WARNING

Extreme caution must be exercised when turning in reverse as not all lathe accessories are designed to be used for reverse turning. Before reverse turning, always ensure the accessories are suitable for this use and that all relevant securing items (such as set screws) are employed correctly. If standard woodturning accessories are used with the lathe running in reverse there is a risk they could come away from the lathe and cause serious harm to the user.

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 e-stop button. 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, twist and puul the e-stop out then press the green button on the control box.

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 on the control box.

Operation safety

Keep surroundings clear and maintain at least 1 metre of clear space around the lathe. During operation. Position yourself with your feet shoulder-width apart, allowing free movement side-to-side as you work along the tool rest. Ensure turning tools, chuck keys, callipers, and other accessories are within easy reach to avoid overreaching or twisting.

If you're turning for long periods, Wear supportive footwear with non-slip soles. Consider standing on cushioned matting to reduce fatigue in feet, legs, and lower back.

Good overhead and task lighting will reduce eye strain and improve surface visibility while turning.

11. 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.

First remove the tailstock. To remove the Tailstock from the lathe bed, the M8 button head socket screw and retaining washer must be removed from the end of the lathe bed as shown in **Fig 11.1**, using a 5 mm hex wrench. Remove the tailstock from the bed and slide along the tool rest holder to the end of the bed.

On the underside of the tool rest holder is a bolt with a M16 nylon locking nut which holds the clamp in place, **Fig 11.2**. Loosen the nylon locking nut using a 16 mm wrench (not supplied), **Fig 11.3**. 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 11.4**.

Adjustment of the Tailstock
The procedure for adjustment of the tailstock is the same as for the tool rest holder. **Fig 11.5** shows the position of the nylon locking nut and clamp. Adjust the nut to required clamping tension.

Fig 11.1

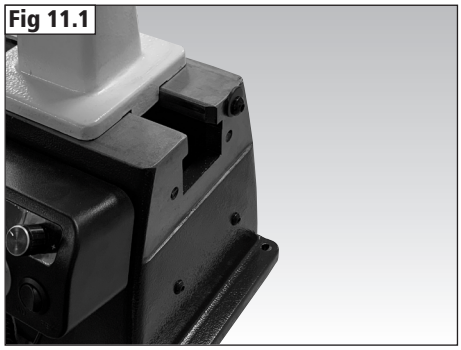


Fig 11.2

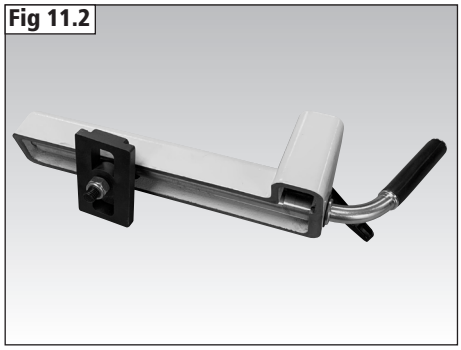


Fig 11.3

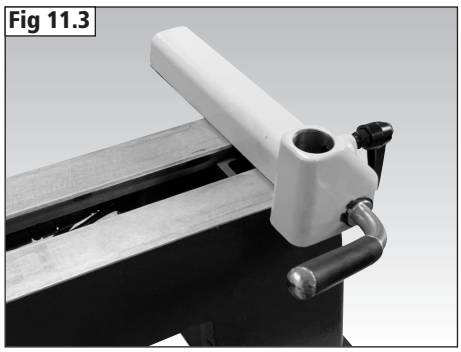


Fig 11.4

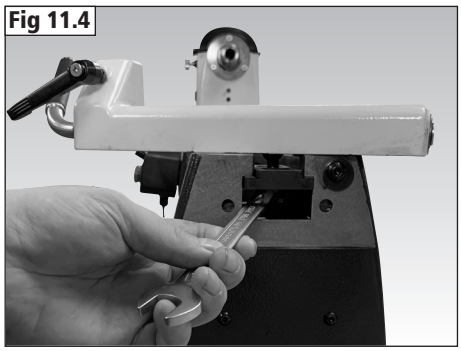
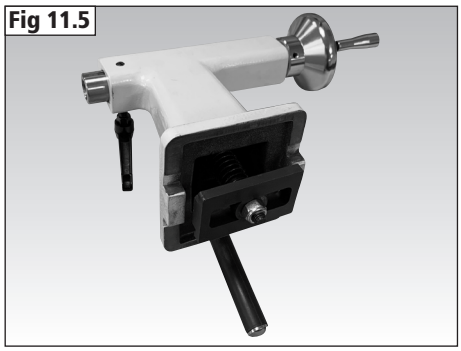


Fig 11.5



Recommended dust extractor: CamVac CGV286-3 or CGV286-4 with CVA250-80-104 2.5" Posable Hose Assembly

11. Maintenance

The machine must be unplugged, and the e-stop pushed in the OFF position while carrying out this procedure.

Changing the Drive Belt
To replace the belt, the spindle shaft must be removed from the headstock. This will allow the old belt to be removed and the new one installed.

Using a 4 mm hex key, open the headstock cover as shown in **Fig 11.6** and the motor pulley access hatch as shown in **Fig 11.7**. Ensure any accessories from the headstock spindle are removed prior. The headstock hand wheel is removed by releasing the 2 set screws located opposite sides on the shaft using a 3 mm hex key, **Fig 11.8**. Once released the handwheel will pull away **Fig 11.9**.

The locking nut has 1 set screw holding this onto the shaft next to the handwheel. Undo this using a 3 mm hex key and then release the nut by the **Fig 11.10** thread. Turn this anticlockwise using the spindle wrench and this will release from the shaft **Fig 11.11**. To help, use the indexing pin to lock the shaft in position.

Fig 11.6

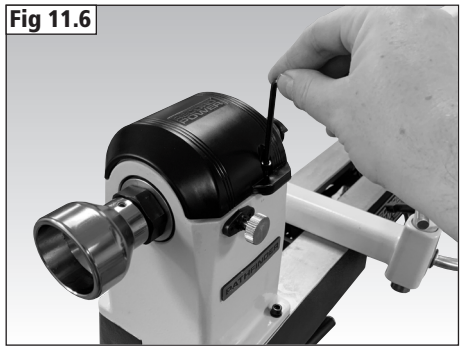


Fig 11.7

Fig 11.8

Fig 11.9

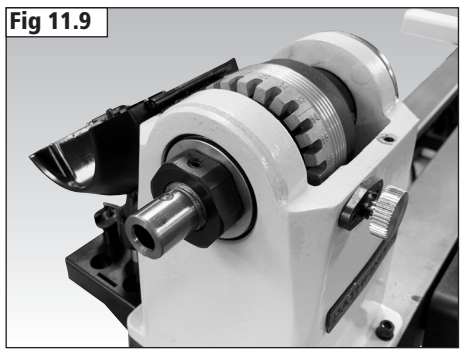


Fig 11.11

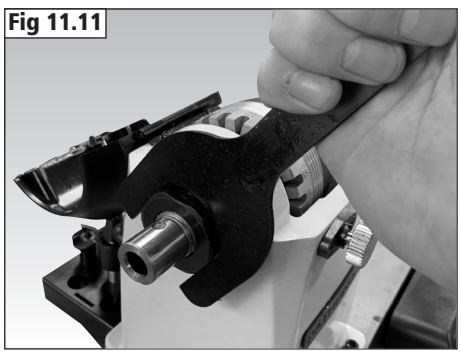


Fig 11.10

11. Maintenance

Remove the 2 pairs of set screws that hold the pulley to the spindle using a 3 mm hex key, **Fig 11.12**. Note that the 2 screws are stacked one on top of the other to give optimum securing of the pulley to the spindle **Fig 11.13**.

The spindle is held in place by 2 bearings. Carefully knock the spindle from the headstock using either a soft head mallet or a hammer against a block of wood towards the tailstock as shown in **Fig. 11.14**. Once free from the bearings, the spindle can be removed as shown in **Fig 11.15**. The spindle pulley and the sensor will drop down into the headstock. To reduce the possibility of damage, push in the knockout bar into the spindle before completely removing the spindle. Leaving the knockout bar in place will catch all parts. Remove carefully while handling parts. (The sensor will pull away this is not attached or connected to anything else).

Use the knockout bar to hold the parts in position while the spindle is pushed back into the headstock. Take care not to damage the threads on the shaft. The new belt can now be placed over the spindle pulley as shown in **Fig 11.15** before replacing the spindle to its original position and re-installing the pulley set screws, lock nut and handwheel.

Fig 11.12

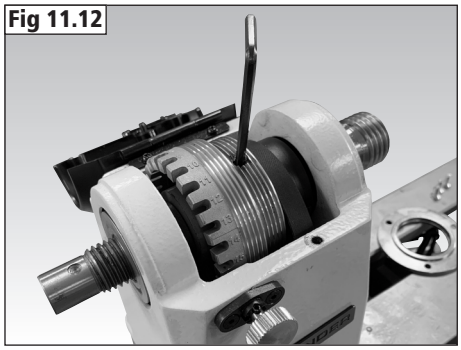


Fig 11.13

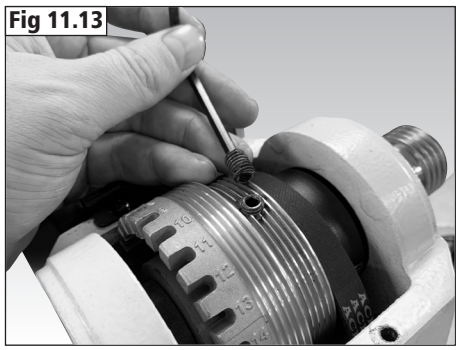
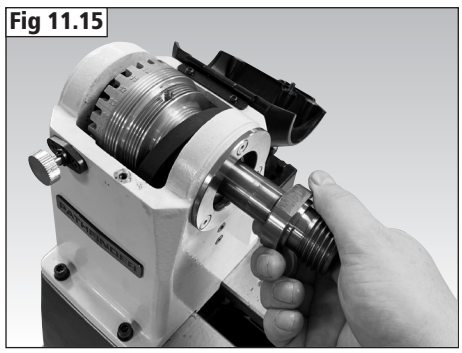


Fig 11.14

Fig 11.15



12. 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 & 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 (not supplied), it is advisable to shape the timber into as cylindrical a profile as possible, see **Fig 12.1**. 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 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 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 12.2**. 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 12.3.**

3. Carefully place the four-prong centre into the headstock spindle of the lathe, **Fig 12.4**, 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 12.5**. Then use the tailstock locking handle the secure the position. The blank is now successfully mounted and ready to be turned.

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 contact 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.

Fig 12.1

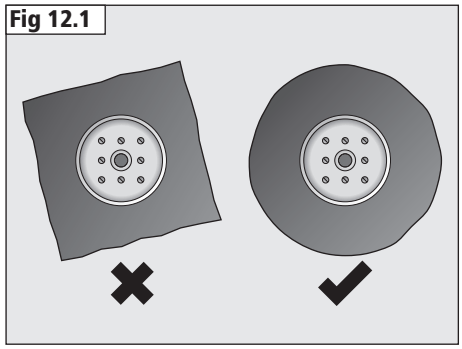


Fig 12.2

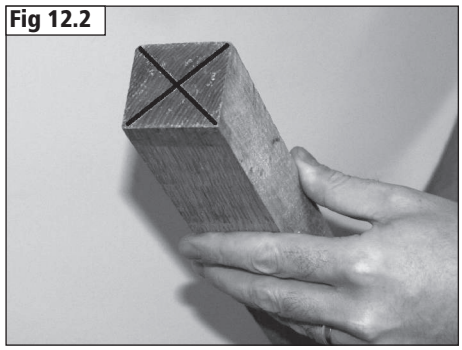


Fig 12.3

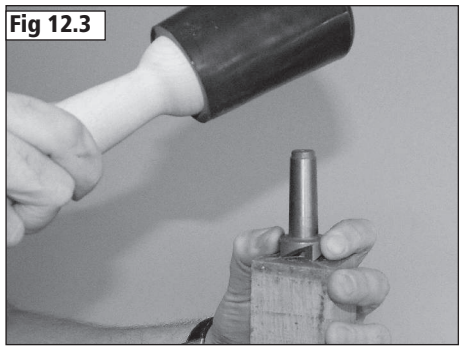
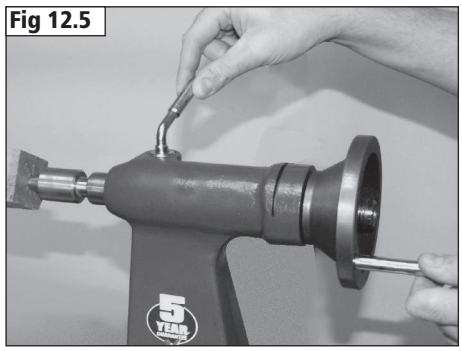


Fig 12.4

Fig 12.5



13. Troubleshooting

Warning: do not make adjustments while the lathe is running. Ensure the switch is off, power is disconnected and all moving parts have stopped before servicing. Failure to comply may result in serious injury.

Problem	Possible Cause	Solution
Motor will not start	Machine not plugged in, Low voltage, Loose connection	Check power supply to machine, Check all external connections
Motor overheats	Motor overloaded, Air flow restricted on motor	Reduce load on motor Clean out motor to obtain normal air flow
Excessive motor noise	Faulty motor, Pulley set screw loose	Have motor checked, Tighten set screw
Motor will not develop full power or stalls	Circuit breakers do not have sufficient capacity, Use of extension cord, Drive belt tension incorrect	Decrease the load on the circuit, Reduce the length of the wire or use a suitable diameter cable, Have the voltage checked by an electrician, Have a licensed electrician install proper size breaker, Use heavier gauge extension cord or no extension cord Adjust belt tension
Machine labours during cutting	Excessive depth of cut, Turning tools are dull	Decrease depth of cut, Sharpen turning tools

Error Codes

Under certain conditions the digital display will show error codes to indicate the nature of a particular error with the machine or its use.

If any error codes still appear, the inverter may be damaged, and Technical Support should be contacted

Code	Condition	Action
01	Overload protection mode	Check if the machine rotates smoothly and that the motor wiring is loose and wired correctly. Turn off the machine and re-start once the digital display has cleared.
02	Hall Signal protection mode	Check that Hall wiring on the motor is not loose and wired correctly. Turn off the machine and re-start once the digital display has cleared.
03	Over current protection	Check if the machine rotates smoothly and that the motor wiring is not loose and wired correctly. Turn off the machine and re-start once the digital display has cleared.
04	Low voltage protection mode	Turn off and unplug the machine. Check the input power supply is sufficient i.e. Circuit overloaded with lights or accessories, Circuit too long or undersized wires used or Voltage is too low. If the input power supply is normal, wait 15-30 seconds then plug it in again to restart.
05	Over Voltage protection mode	Turn off and unplug the machine. Check the input power supply. If the input power supply is normal, wait 15-30 seconds then plug it in again to restart.
06	Spindle Direction Protection mode	The spindle direction has changed during operation. Turn off and unplug the machine. Wait 15-30 seconds then plug it in again to restart.
07	Temperature protection	When the temperature inside the controller reaches 85ºC, the controller provides protection and the motor stops running.
08	Motor Locked Rotor Protection mode.	Check the indexing locking pin is not locked and if the spindle rotates smoothly. Turn off the machine and re-start once the digital display has cleared.
—	There are no numbers displayed on the digital display.	Check both the connection cables. Both the communication cable of the display box and the RPM speed reading cable.

14. Electrical Connection & 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 must 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)

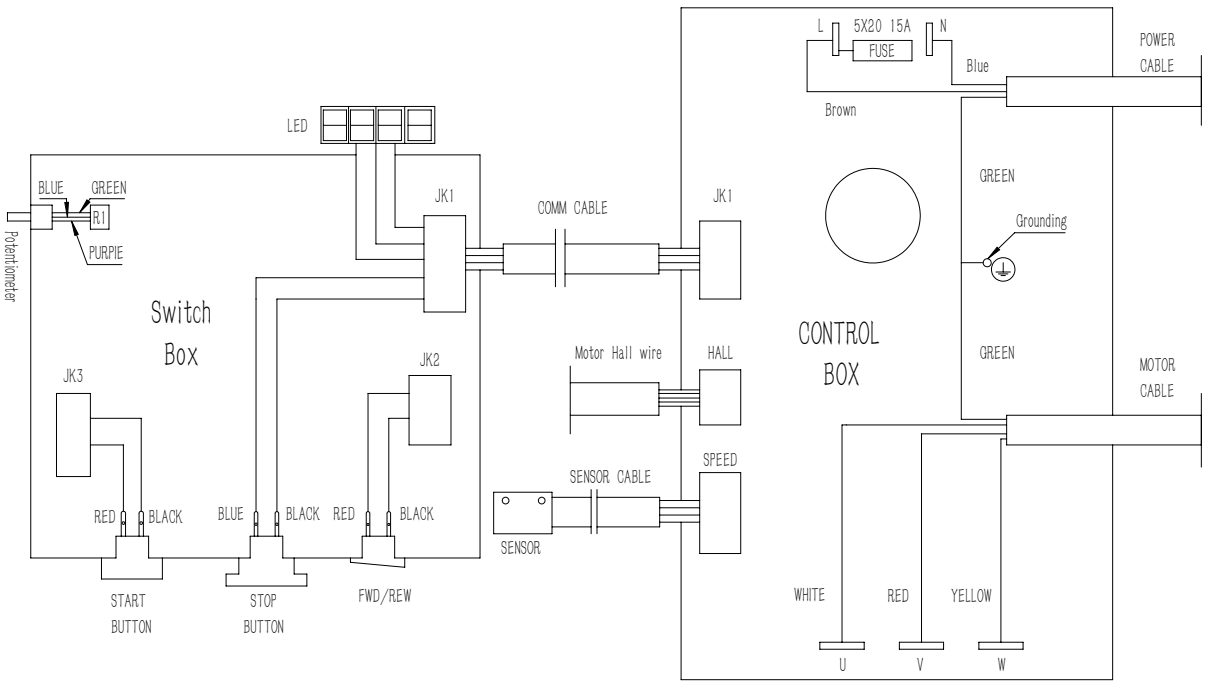
The wire-coloured brown must always be connected to the terminal marked 'L' or coloured red.
The wire-coloured blue must always be connected to the terminal marked 'N' or coloured black.
The wire coloured green and yellow must always be connected to the terminal marked 'E' or with the earth symbol:

or coloured green / green and yellow.
It is important that the machine is effectively earthed. Some machines will be clearly marked with the double insulated logo:

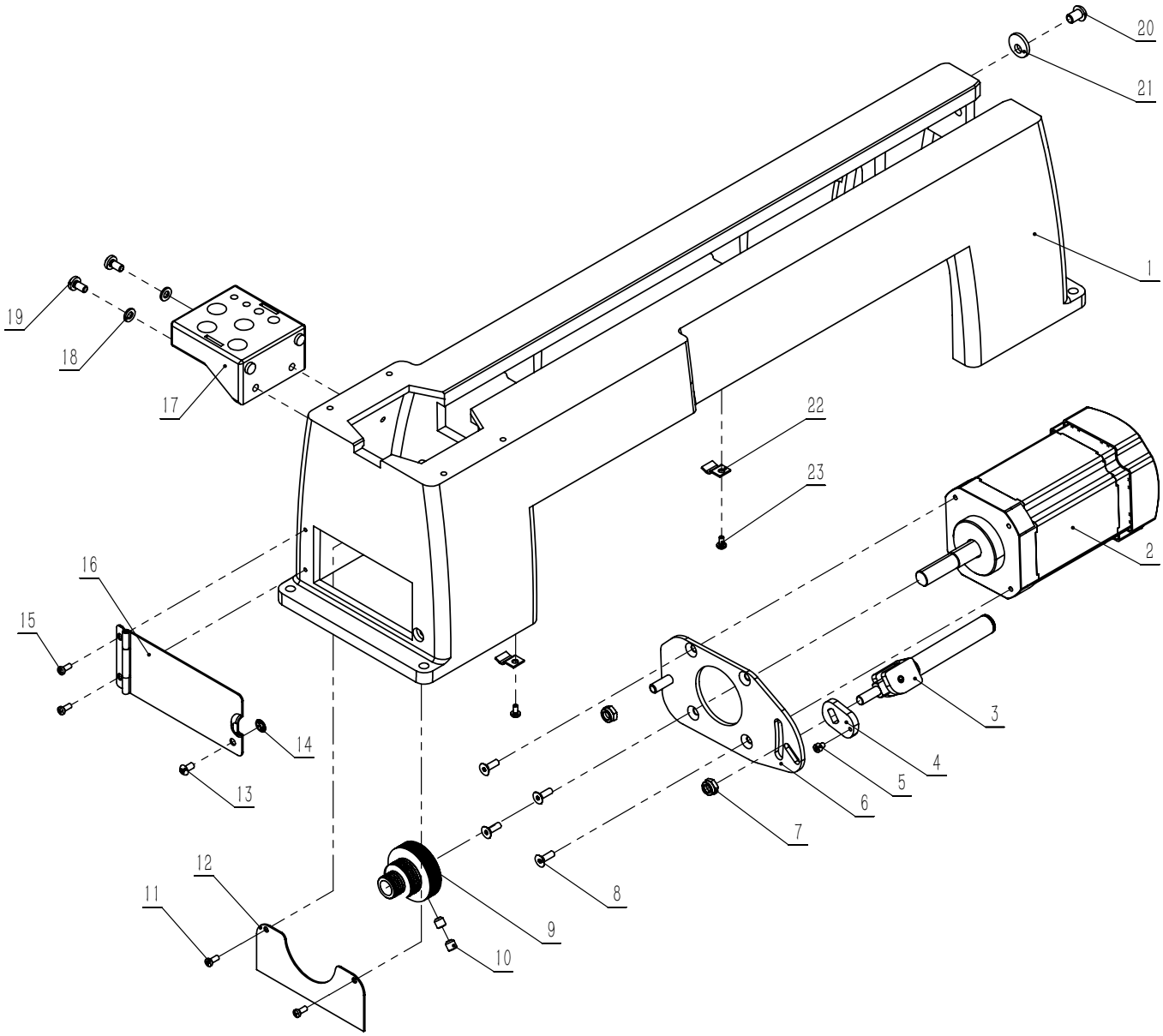
In this case there will not be an earth wire within the circuit.
In the case of the BS1363 plug for use in the UK, always ensure that it is fitted with a fuse conforming to BS1362 appropriate to the rating of the machine. If replacing the original fuse, always fit a fuse of equivalent rating to the original. Never fit a fuse of a higher rating than the original. Never modify the fuse or fuse holder to accept fuses of a different type or size.
Where the current rating of the machine exceeds 13 A at 230 V, or if the machine is designated for use on a 400 V 3 phase supply a connector conforming to BS4343 (CEE17 / IEC60309) will be used.
230 V machines will be fitted with a blue 3 pin connector. The wiring for this type of this connector will be the same as shown above. 400 V, 3 phase machines will be fitted with a red 4 or 5 pin connectors. The wiring for this type of connector is as shown below:

400 V (3 phase)
Brown: Live (L1)
Black: Live (L2)
Grey: Live (L 3)
Blue: Neutral (N)
Green and Yellow: Earth (E)

The wire-coloured brown must always be connected to the terminal marked 'L1'.
The wire-coloured black must always be fitted to the terminal marked 'L2'.
The wire-coloured grey must always be connected to the terminal marked 'L3'.
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
If in doubt about the connection of the electrical supply, always consult a qualified electrician.



15. Parts Diagram & List

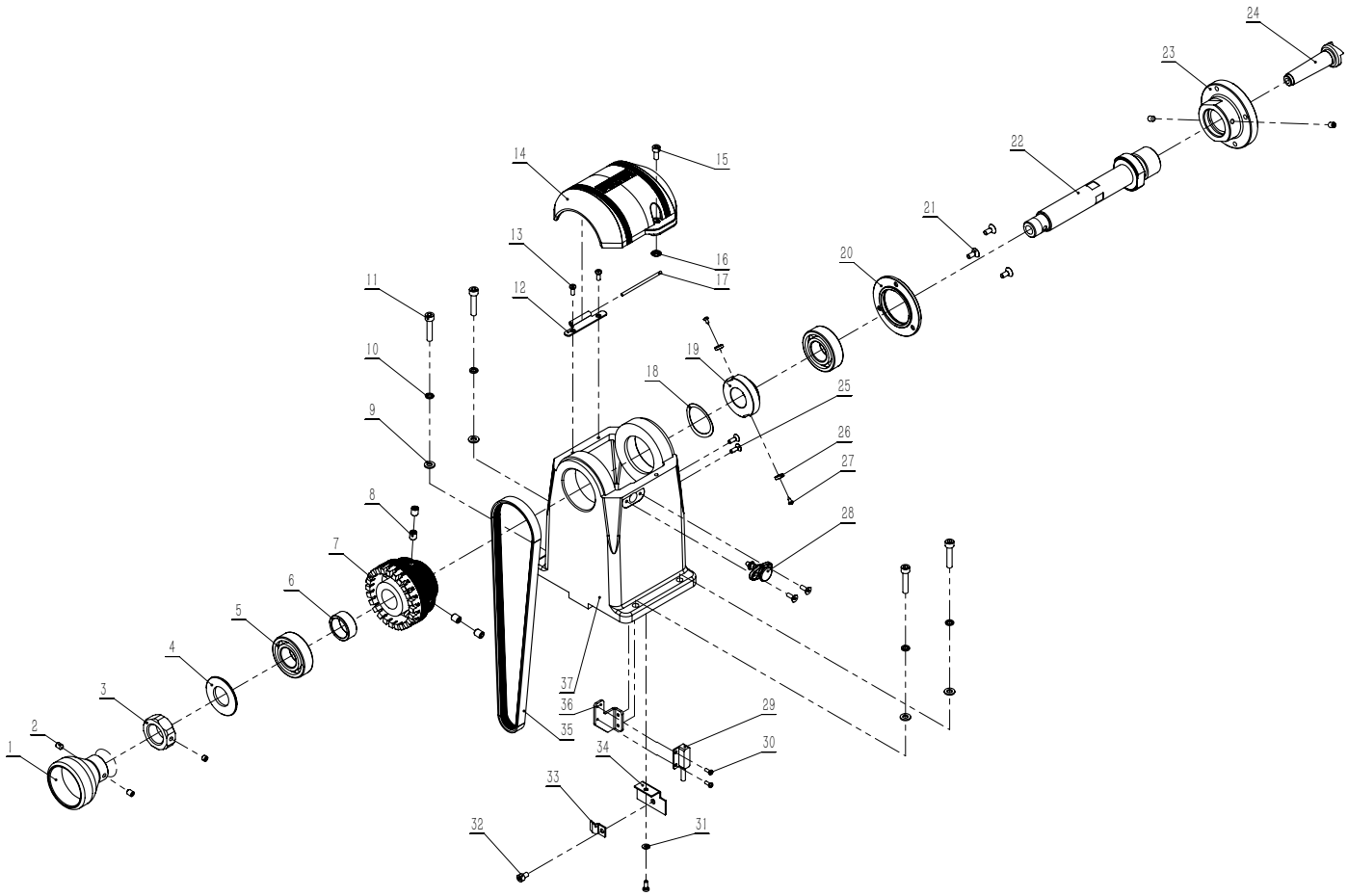


Bed Assembly

No.	Description	Qty
1	Bed	1
2	Motor	1
3	Tension handle assembly	1
4	Tension plate	1
5	Hex socket head cap scrw M4x5	1
6	Motor connecting plate	1
7	Hex locking nut M8	2
8	Hex countersunk head screw M5x16	4
9	Motor pulley	1
10	Set screw M8x8	2
11	Cross pan head screw M4x8	2
12	Plate	1
13	Hex socket head screw M5x12	1
14	Washer	1

No.	Description	Qty
15	Cross pan head screw M4x10	2
16	Bed cover plate door	1
17	Tool holder	1
18	Washer 6	2
19	Cross pan head screw M6x12	2
20	Hexl socket head screw M8x12	1
21	Eccentric washer	1
22	Cable clamp	2
23	Cross pan head screw M4x8	2

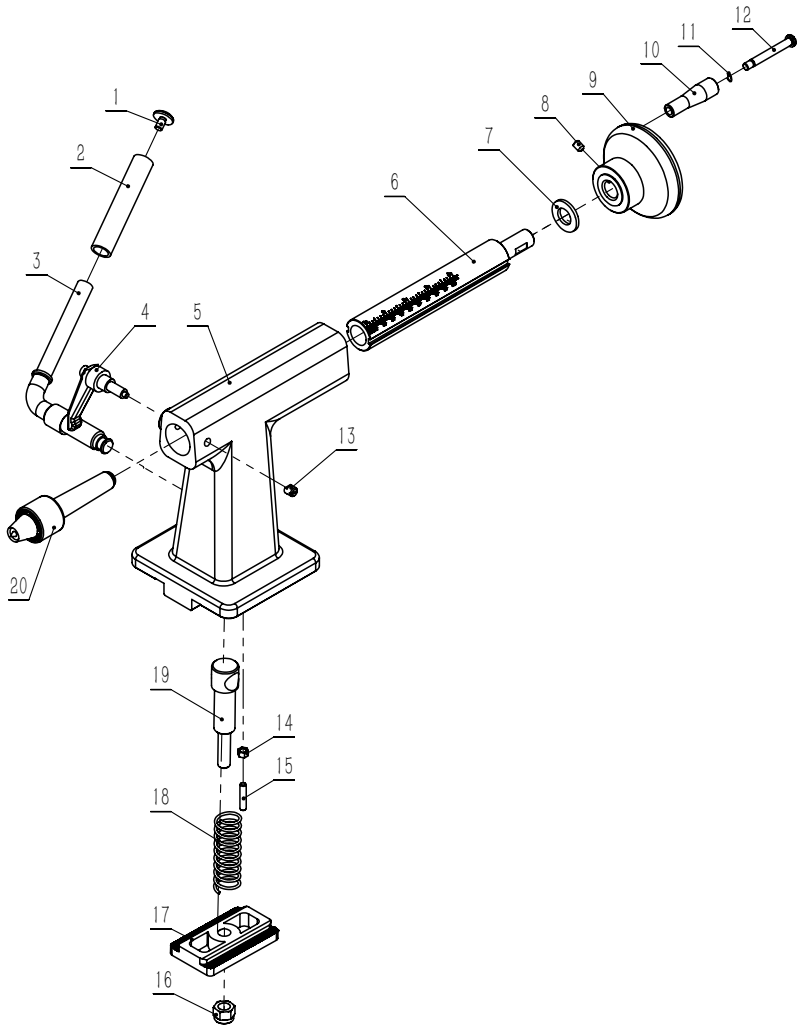
15. Parts Diagram & List



Headstock Assembly

No.	Description	Qty
1	Hand wheel	1
2	Set screw M6x8	4
3	Self-locking nut	1
4	Washer	1
5	Bearing	2
6	Spacer bush	1
7	Spindle pulley	1
8	Set screw M8x10	4
9	Flat washer 6	4
10	Spring washer 6	4
11	Hex socket head cap scrw M6x30	4
12	Hinge	1
13	Cross pan head screw M4x10	3
14	Headstock cover	1
15	Hex socket head cap scrw M5x12	1
16	Washer	1
17	Hinge shaft	1
18	Wave washer	1
19	Magnetic steel sleeve	1
20	Bearing end cap	1
21	Hex countersunk head screw M5x12	3
22	Spindle	1
23	3" faceplate	1
24	Drive Centre	1
25	Screw M4x12	4
26	Magnet	2
27	Self tapping screw	2
28	Index pin assembly	1
29	Speed sensor	1
30	Cross pan head screw M4x8	2
31	Flat washer 4	1
32	Hex socket head cap scrw M5x8	1
33	Cable clamp	1
34	Plate	1
35	Poly-v-belt	1
36	Support bracket	1
37	Headstock	1

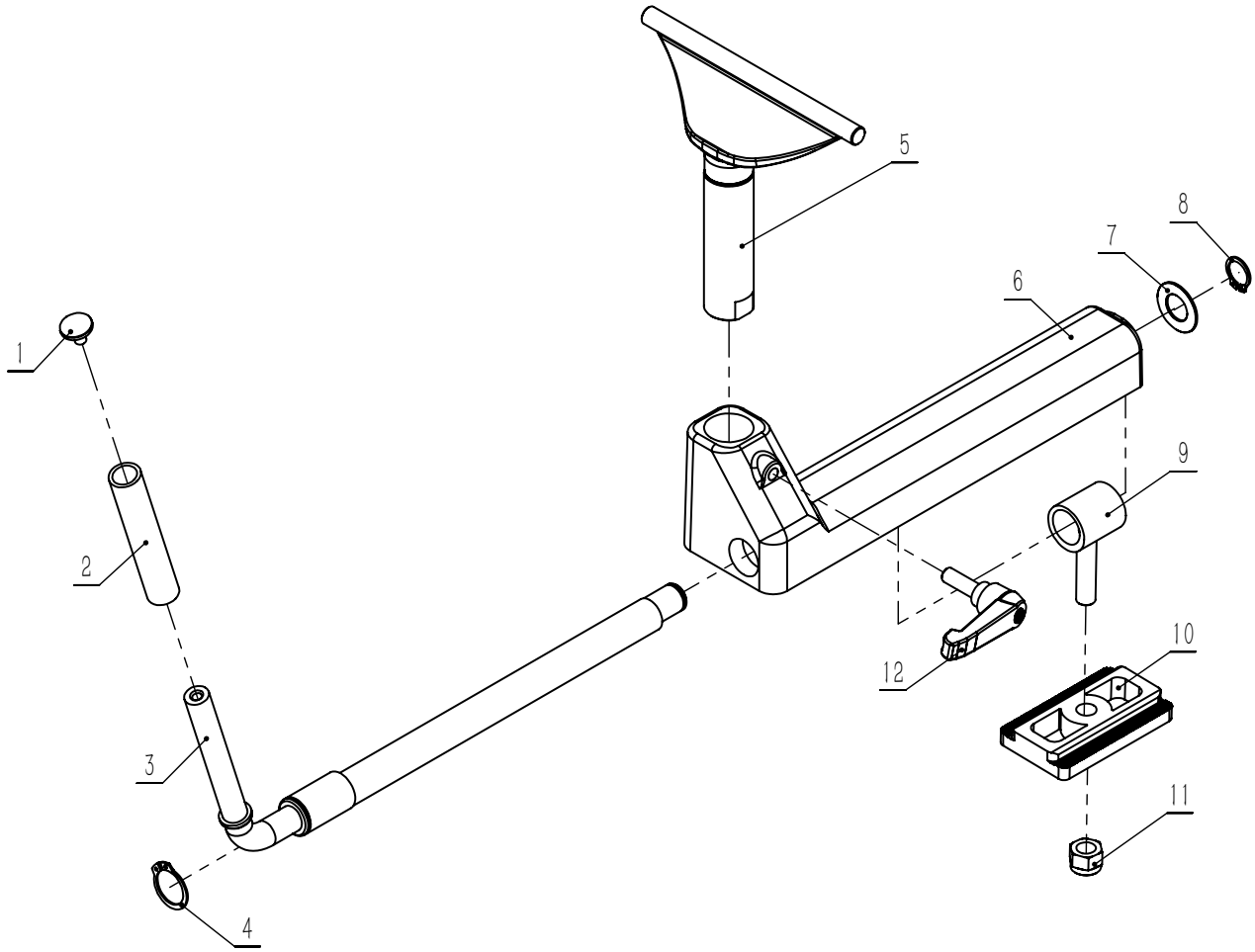
15. Parts Diagram & List



Tailstock Assembly

No.	Description	Qty
1	Thread cap	1
2	Handle sleeve	1
3	Tailstock cam lock handle	1
4	Locking handle	1
5	Tailstock	1
6	Tailstock barrel	1
7	Washer 15x28x2.75	1
8	Hex socket set screw M6x8	1
9	Tailstock hand wheel	1
10	Hand wheel handle	1
11	Spring washer	1
12	Screw	1
13	Anti-rotation screw	1
14	Hex nut M5	1
15	Set screw M5x25	1
16	Locking nut M10	1
17	Clamping plate	1
18	Compression spring	1
19	Threaded shaft	1
20	Revolving centre	1

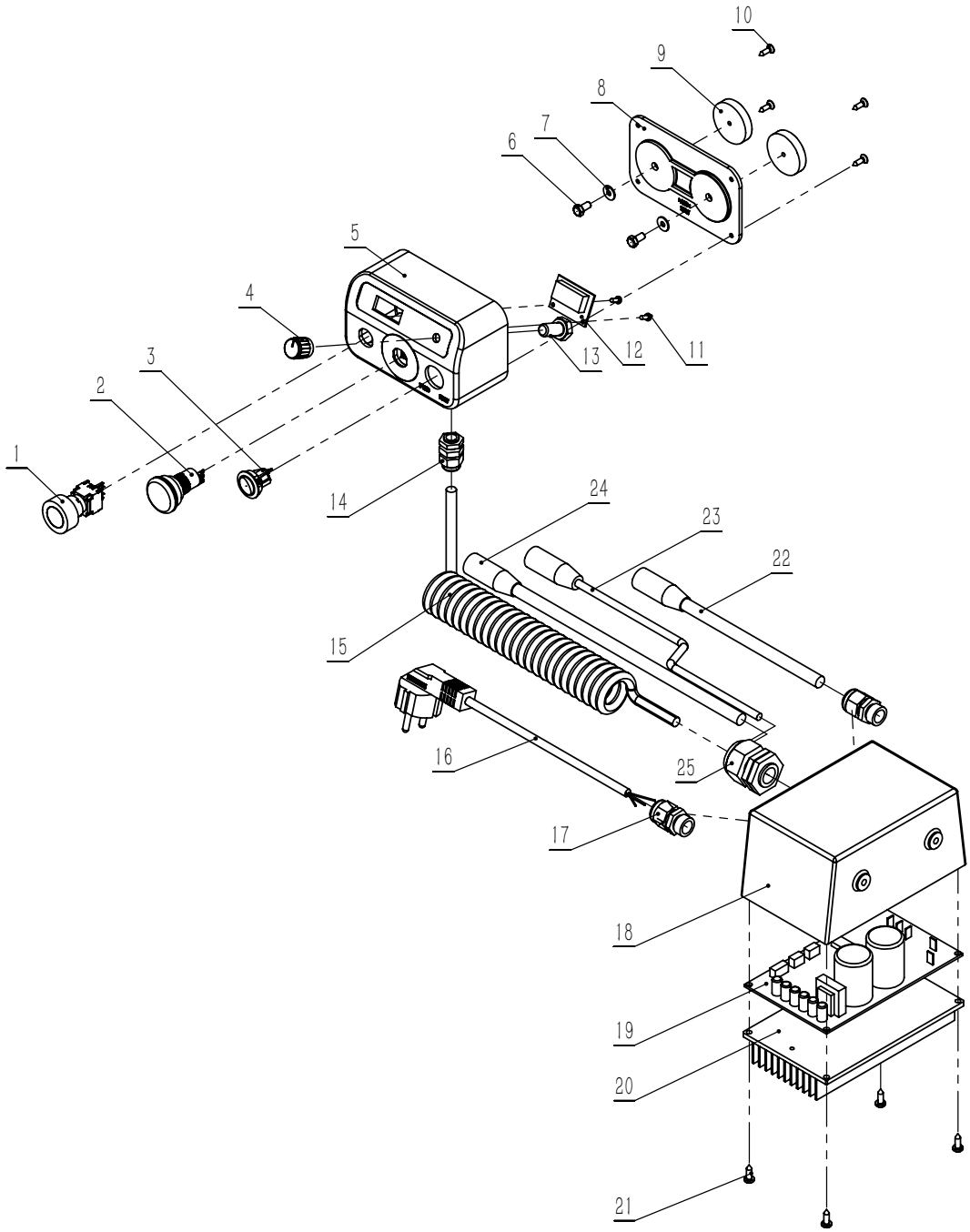
15. Parts Diagram & List



Tailstock Assembly

No.	Description	Qty
1	Threaded cap end	1
2	Handle sleeve	1
3	Cam lock handle	1
4	Circlip 21	1
5	6"Tool rest	1
6	Tool rest base	1
7	Washer 15x28x1	1
8	Circlip 15	1
9	Locking tube	1
10	Tool rest clamp	1
11	Hex locking nut M10	1
12	Locking handle	1

15. Parts Diagram & List



Control Box Assembly

No.	Description	Qty
1	Start button	1
2	Stop button	1
3	Forward and reverse switch	1
4	Potentiometer knob	1
5	Switch box	1
6	Hex bolt M4x8	2
7	Washer 4	2
8	Switch box cover	1
9	Magnet steel	2
10	Self-tapping screw ST3D5x13	4
11	Self-tapping screw ST2D9x9	2
12	Digital display board	1
13	Potentiometer	1
14	Cable gland M12	1
15	Spring cable to switch box	1

No.	Description	Qty
16	Power Cable with plug	1
17	Cable gland M16	2
18	Controller Assembly cover	1
19	Controller circuit board	1
20	Controller board base	4
21	Self-tapping screw ST4D2x13	4
22	Cable to motor	1
23	Cable to RPM reader	1
24	Cable to Motor	1
25	Cable gland M20	1

EC Declaration of Conformity

Cert No: EU / Pathfinder / 1

Record Power Ltd
Centenary House
11 Midland Way
Barlborough Links
Chesterfield
Derbyshire
S43 4XA
United Kingdom

declares that the machinery described:

1. Type: Woodturning Lathe

2. Model No: 14001, 14002 (Pathfinder)

3. Serial No: Engineering Sample

Conforms with the following standards:

MACHINERY DIRECTIVE:	2006/42/EC
ADDITIONAL USED EC DIRECTIVES:	2014/13/EU
USED HARMONIZED STANDARDS:	EN ISO 12100: 2010 EN IEC 55014-1:2021 EN IEC 55014-2:2021 EN IEC 61000-3-2: 2019/A1:2021 EN 61000-3-3: 2013/A2:2021 EN 62841-1:2015+A11:2022

and complies with the relevant essential health and safety requirements and conforms to the machinery example for which the EC Type-Examination certificate numbers **TA385223947** and **TA385244833** have been issued at:

TÜV Austria (Shanghai) Co. Ltd., Room 12D Orient Century Building, No. 345 Xian Xia Road, Shanghai 200336, P. R. China

Signed.....Dated: 24/10/2025
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

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Woodworking Machinery and Accessories

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