

Original Instruction Manual

Coronet Envoy 16" Heavy-Duty Swivel-Head Cast Iron Variable Speed Lathe
Coronet Regent 18" Heavy-Duty Swivel-Head Cast Iron Variable Speed Lathe

Version 3.4
January 2021



Coronet Envoy shown



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 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 used at all times. 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 is capable of supporting 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 be level and stable at all times

- 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 of the feet of the machine should make contact with 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 work tables. 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 eg. 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.

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.

2. General Health and Safety Guidance

- 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 in to the machine without overreaching.
- Keep proper footing and balance at all times.

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 on of the power supply, 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 2.5mm² 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 in to 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 table top.
- 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 a combination of operator common sense and alertness at all times 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 in order 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 are 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.

27. Maintain your machine with care

- This manual gives clear instructions on installation, set up and operation of the machine and also details any routine and preventative maintenance that should be performed periodically by the user.
- Remember always to switch off and unplug the machine from the power supply before carrying out any setting up or maintenance operations.
- 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.

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

2. General Health and Safety Guidance

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 of 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 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 quill 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

Coronet Envoy

UK, Europe, Australia and New Zealand Specifications (17001)

Voltage: 230 V
Frequency: 50 Hz
Motor input P1: 1.5 kW
Motor output P2: 1.1 kW
Motor speed: 1400 rpm
Full load current: 4.5 A

Max. bowl diameter: 1000 mm (39")
Max. between centres: 610 mm (24")
Max. swing over bed: 410 mm (16")
Spindle speeds: 250 - 3800 rpm
Taper: 2 Morse Taper
Spindle Thread: M33 x 3.5

Quill travel: 90 mm
Size: W1435 x D540 x H1190 mm
Weight: 140 kg
Sound Pressure Level: No load < 83 dB(A)
Sound Power Level: No load < 83 dB(A)
Weight: 140 kg

Coronet Envoy

United States of America and Canada Specifications (17002)

Voltage: 110 V
Frequency: 60 Hz
Motor input P1: 1.5 kW
Motor output P2: 1.1 kW
Motor speed: 1720 rpm
Full load current: 9 A

Max. bowl diameter: 1000 mm (39")
Max. between centres: 610 mm (24")
Max. swing over bed: 410 mm (16")
Spindle speeds: 250 - 3800 rpm
Taper: 2 Morse Taper
Spindle Thread: 1 1/4" x 8 TPI

Quill travel: 90 mm
Size: W1435 x D540 x H1190 mm
Weight: 140 kg
Sound Pressure Level: No load < 83 dB(A)
Sound Power Level: No load < 83 dB(A)
Weight: 140 kg

Coronet Envoy Gear Torque (Newton-Meter)

	High speed	Medium speed	Low speed
High gear	19.6	48.1	62.8
Low gear	15.2	47.1	66.7

Coronet Regent

UK, Europe, Australia and New Zealand Specifications (18001)

Voltage: 230 V
Frequency: 50 Hz
Motor input P1: 2 kW
Motor output P2: 1.5 kW
Motor speed: 1400 rpm
Full load current: 6 A

Max. bowl diameter: 1000 mm (39")
Max. between centres: 610 mm (24")
Max. swing over bed: 460 mm (18")
Spindle speeds: 250 - 3800 rpm
Taper: 2 Morse Taper
Spindle Thread: M33 x 3.5

Quill travel: 90 mm
Size: W1450 x D540 x H1215 mm
Weight: 145 kg
Sound Pressure Level: No load < 83 dB(A)
Sound Power Level: No load < 83 dB(A)
Weight: 145 kg

Coronet Regent

United States of America and Canada Specifications (18002)

Voltage: 220 V
Frequency: 60 Hz
Motor input P1: 2 kW
Motor output P2: 1.5 kW
Motor speed: 1720 rpm
Full load current: 6 A

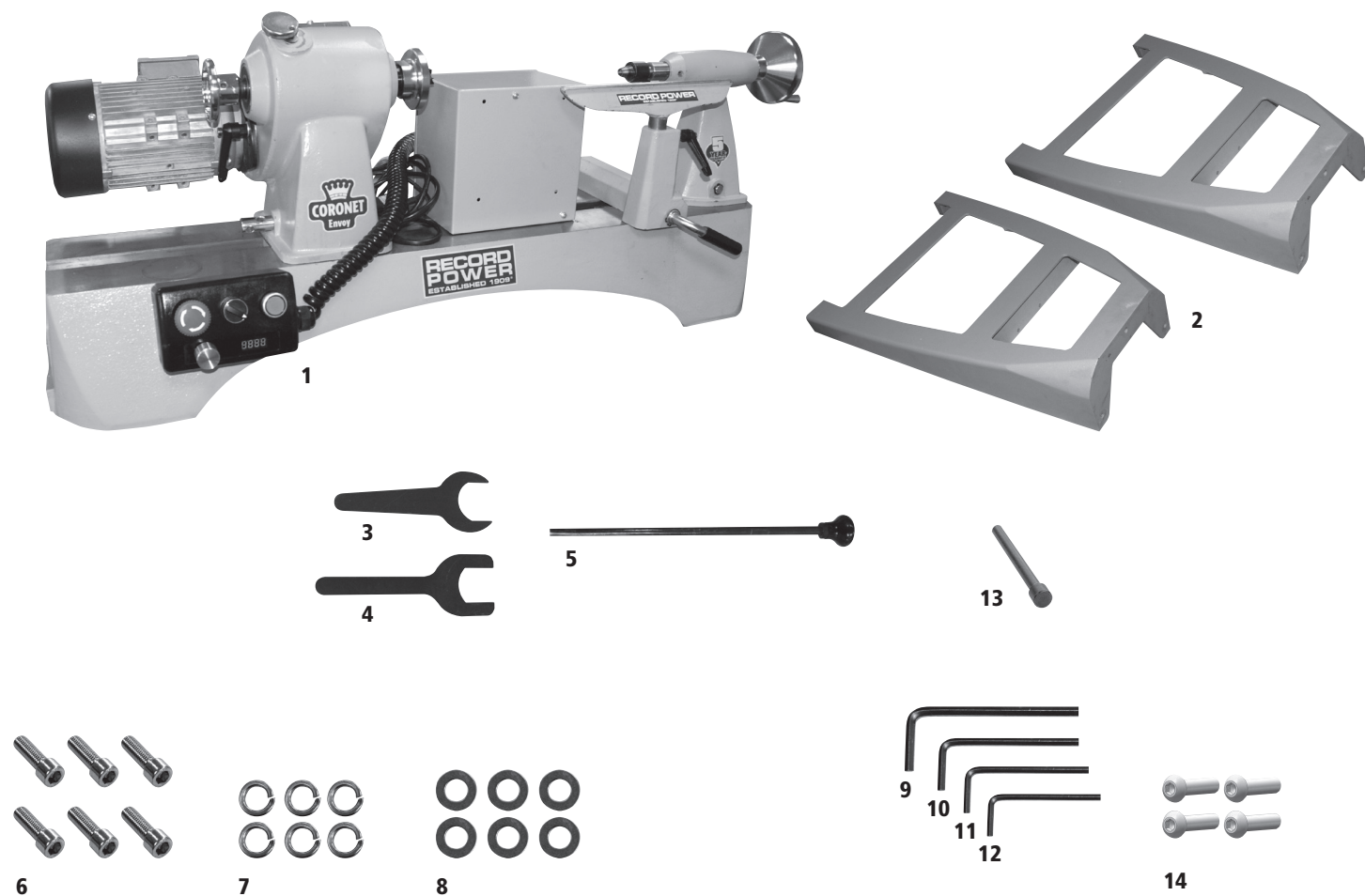
Max. bowl diameter: 1000 mm (39")
Max. between centres: 610 mm (24")
Max. swing over bed: 460 mm (18")
Spindle speeds: 250 - 3800 rpm
Taper: 2 Morse Taper
Spindle Thread: 1 1/4" x 8 TPI

Quill travel: 90 mm
Size: W1450 x D540 x H1215 mm
Weight: 145 kg
Sound Pressure Level: No load < 83 dB(A)
Sound Power Level: No load < 83 dB(A)
Weight: 145 kg

Coronet Regent Gear Torque (Newton-Meter)

	High speed	Medium speed	Low speed
High gear	18.5	43.6	77.5
Low gear	18.1	42.7	76.5

6. Contents of the Package



Item	Description	Quantity	Item	Description	Quantity
1	Coronet Envoy / Regent with headstock, tailstock, tool rest holder, tool rest, faceplate, 4-prong drive centre and live centre pre-assembled	1	8	M10 spring washers	6
2	Legs	2	9	8 mm hex wrench	1
3	46 mm wrench	1	10	4 mm hex wrench	1
4	38 mm wrench	1	11	3 mm hex wrench	1
5	Operating Bar	1	12	2.5 mm hex wrench	1
6	M10 x 30 mm hex head socket screws	6	13	Drive centre knockout bar	1
7	M10 washers	6	14	M6 x 25 mm socket pan head screws	4

6. Contents of the Package

Unpacking and Cleaning

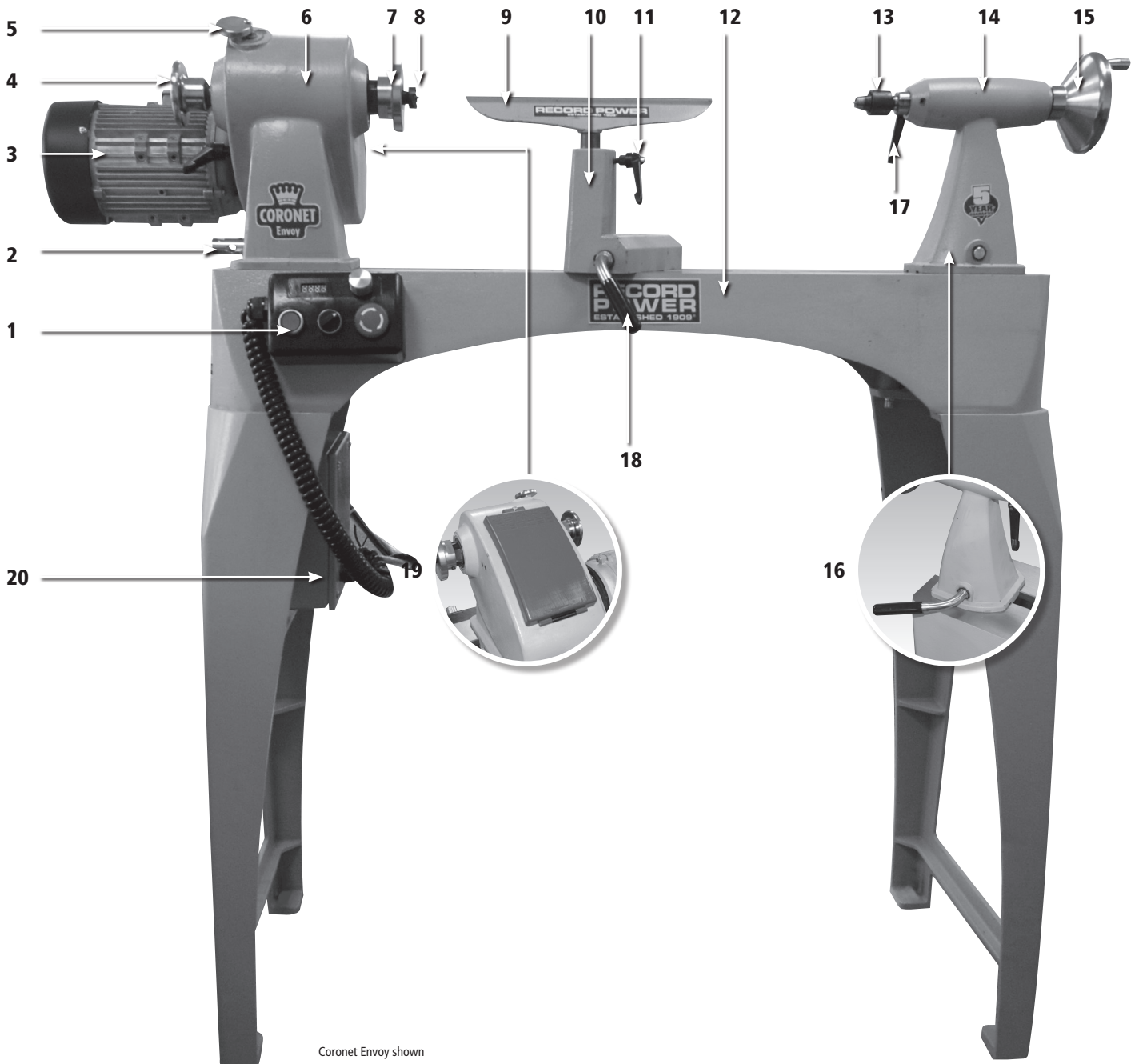
1. Carefully lift the lathe from the carton and check that all of the components and contents have been included. Place parts on a protected surface.
2. Clean all rust protected surfaces with white spirit. Do not use gasoline, paint thinner, mineral spirits, etc. These may damage painted surfaces. Make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

Tools Needed for Assembly

(Not supplied)
24 mm wrench



7. Getting to Know Your Lathe



Coronet Envoy shown

- 1 Control unit
- 2 Headstock locking shaft
- 3 Motor
- 4 Hand wheel
- 5 Indexing dial
- 6 Headstock
- 7 Faceplate

- 8 4-prong drive centre
- 9 Tool rest
- 10 Tool rest holder
- 11 Tool rest locking lever
- 12 Lathe bed
- 13 Revolving centre
- 14 Tailstock

- 15 Tailstock hand wheel
- 16 Tailstock locking lever
- 17 Tailstock quill locking lever
- 18 Tool rest holder locking lever
- 19 Pulley access hatch
- 20 Electrical enclosure box

8. Assembly



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



The lathe is heavy and must be assembled by two people.

Before mounting the lathe to the legs the tailstock, tool rest holder and headstock must be removed.

Remove the end stop screws shown in **Fig 8.1** using an 8 mm hex wrench. These are placed at both ends of the bed to stop accidental removal of the headstock, tailstock and tool rest holder.

Loosen the tailstock locking lever as shown in **Fig 8.2** and slide it from the lathe bed.

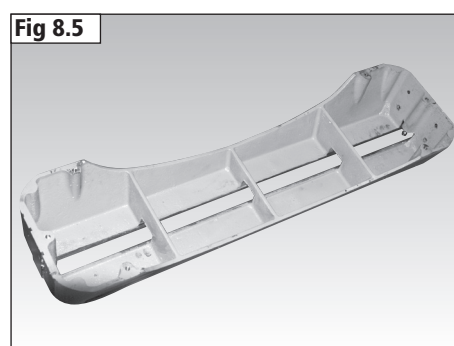
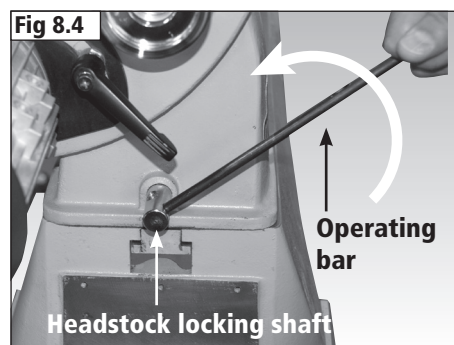
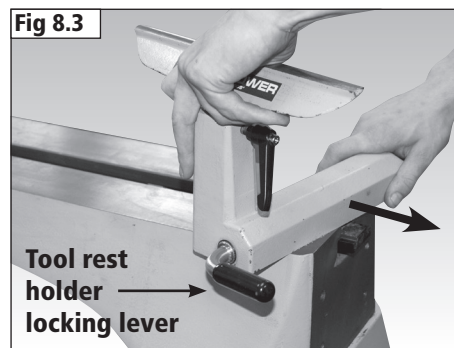
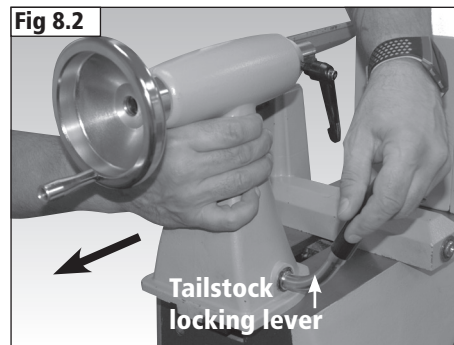
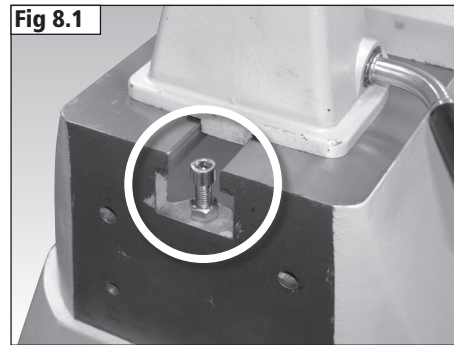
Loosen the tool rest holder locking lever as shown in **Fig 8.3** and slide it from the lathe bed.

Use the operating bar to loosen the headstock by turning the locking shaft anti-clockwise as shown in **Fig 8.4**. Slide the headstock from the lathe.



WARNING: The headstock is heavy and should be removed and re-installed by two people.

Turn the lathe bed upside down as shown in **Fig 8.5**.



8. Assembly

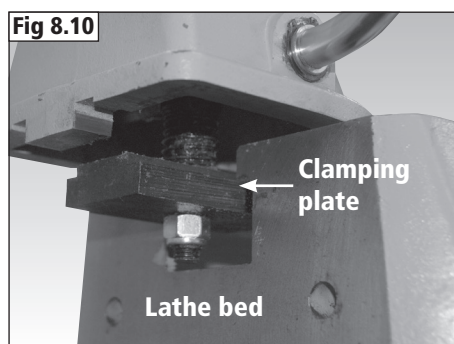
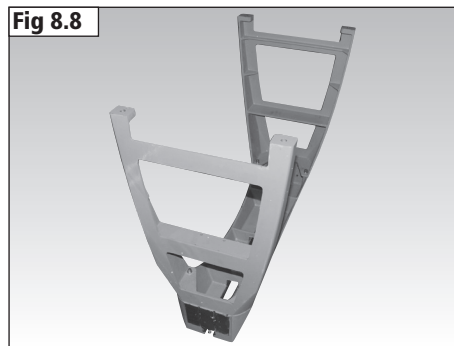
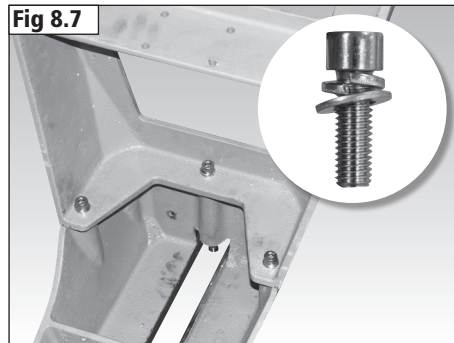
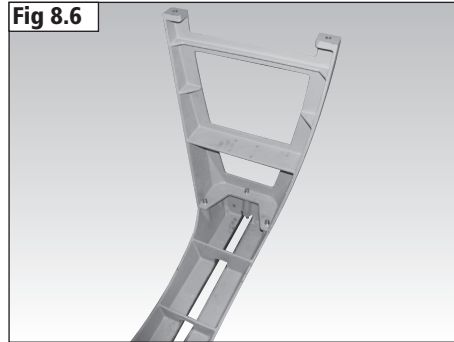
Place one of the legs on the bed as shown in **Fig 8.6** and secure in place using 5 M10 x 30 mm screws, washers and spring washers as shown in **Fig 8.7**. Ensure the spring washer is placed between the washer and the screw head as shown in **Fig 8.7**.

Repeat the process to assemble the remaining leg to the other end of the lathe bed, **Fig 8.8**.

Place the assembled bed and legs upright as shown in **Fig 8.9**.

Secure the lathe to a level floor using suitable fixings through the 4 fixing holes on the legs.

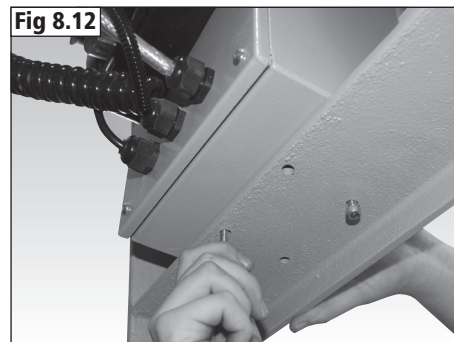
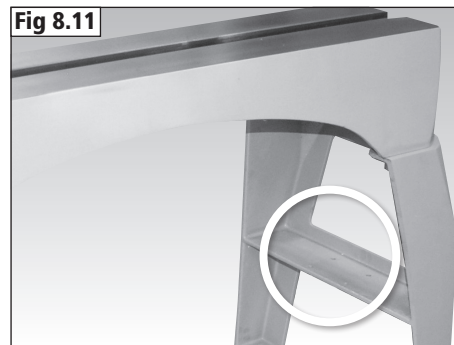
Re-install the tool rest holder, tailstock and headstock, ensuring the locking levers and shafts are loosened to allow the clamping plates to be refitted to the bed as shown in **Fig 8.10**.



8. Assembly

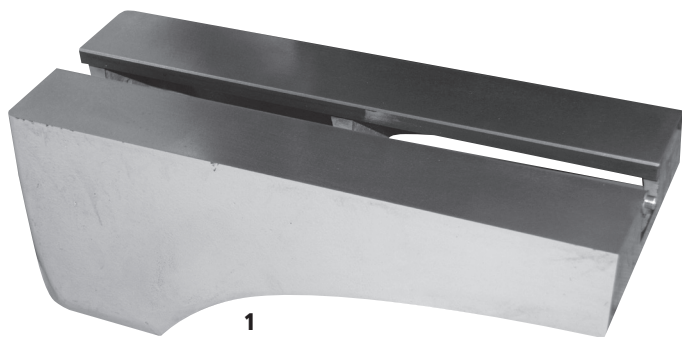
Using the holes in the leg closest to the headstock as shown in **Fig 8.11**, attach the electrical enclosure box using 4 M6 x 25 mm socket pan head screws as shown in **Fig 8.12** using a 4 mm hex wrench.

Place the magnetic control unit in the desired position as shown in **Fig 8.13**.

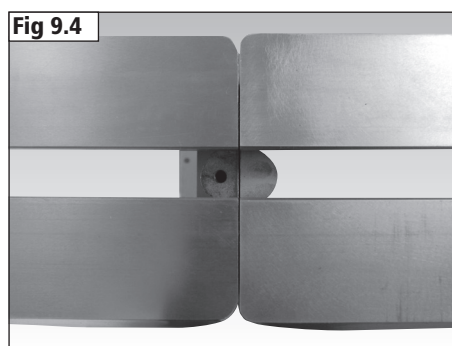
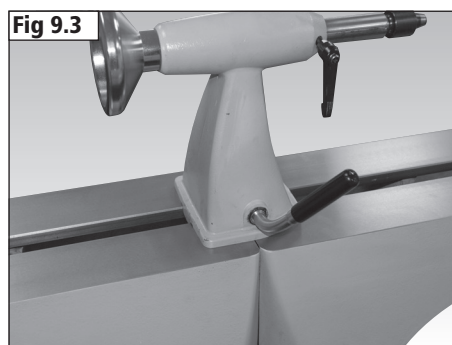
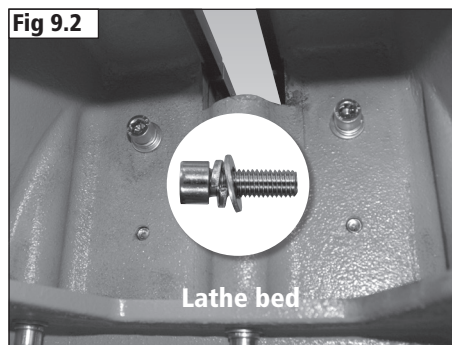
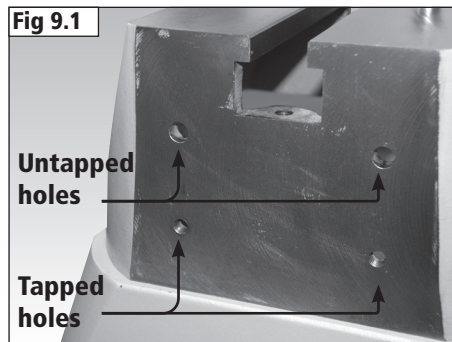


9. Assembly of the Optional Bed Extension

Contents of the Package



Item	Description	Quantity
1	Coronet Envoy / Regent bed extension	1
2	M10 x 30 mm hex head socket screws	4
3	M10 washers	4
4	M10 spring washers	4



Due to the weight of the bed extension it is recommended that one person holds the extension while a second threads the screws.
To eliminate the risk of cross-threading the screws or holes, thread both screws through at an equal rate. This will ensure the extension is pulled against the bed squarely.

The end of the lathe bed features 4 holes for mounting the bed extension, **Fig 9.1**. The upper holes are untapped and the lower holes are tapped.

The end of the bed extension features corresponding holes. The upper holes are tapped and the lower untapped.

Attach the bed extension to the lathe bed by placing two screws, washers and spring washers through the untapped holes of the lathe bed and screw into the bed extension. Complete installation by placing the remaining two screws, washers and spring washers through the bed extension and screwing into the lathe bed as shown in **Fig 9.2**. Ensure the spring washers are placed next to the screw heads as shown in **Fig 9.2**.



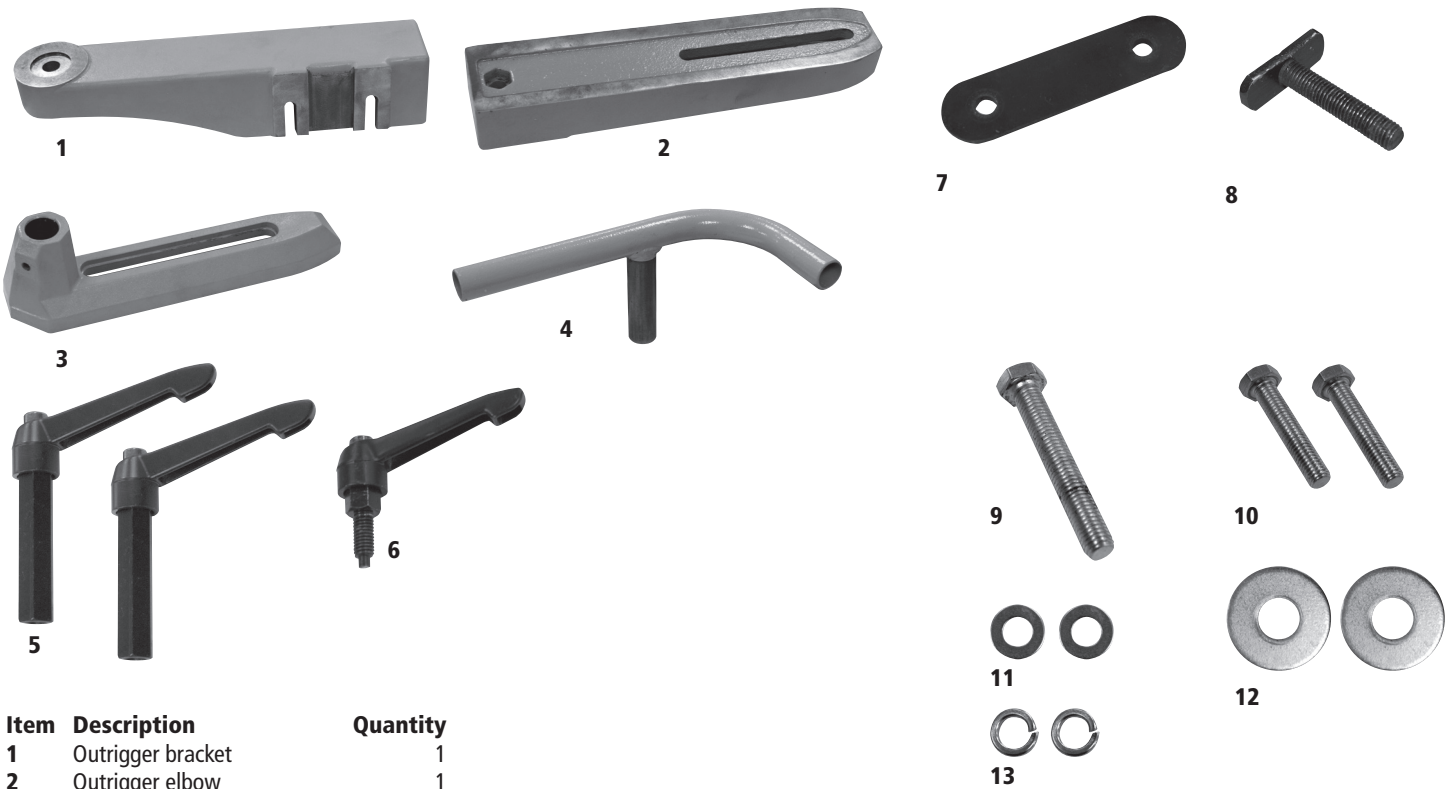
Do not fully tighten the screws until both bed surfaces are aligned.

Fit the tailstock to straddle both bed surfaces shown in **Fig 9.3**. Tighten the tailstock locking lever to bring the two surfaces flush.

Before fully tightening all screws, ensure both beds also run parallel to each other as shown in **Fig 9.4**.

10. Assembly of the Optional Outrigger

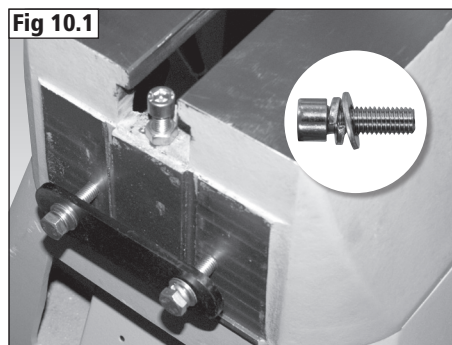
Contents of the Package



Item	Description	Quantity
1	Outrigger bracket	1
2	Outrigger elbow	1
3	Outrigger tool rest	1
4	Curved tool rest	1
5	Large ratchet handle	2
6	Tool rest holder ratchet handle	1
7	Outrigger bracket fixing plate	1
8	Outrigger tool rest holder screw	1
9	M12 x 80 hex head screw	1
10	M10 x 60 hex head screw	2
11	Washers	2
12	Large washers	2
13	Spring washers	2

Attach the outrigger bracket fixing plate to the end of the bed using 2 M10 x 60 screws, washers and spring washers as shown in **Fig. 10.1**. Leave a gap large enough to slide the outrigger bracket over. Ensure the spring washers are placed next to the screw head as shown.

Slide the outrigger bracket over the screws as show in **Fig 10.2**, ensuring the fixing plate is on the inside of the bracket.



10. Assembly of the Optional Outrigger

Tighten the screws using a 17 mm wrench to secure the bracket in place. Ensure the protruding section of the bed sits within the recess of the bracket as shown in **Fig 10.3**.

Place the outrigger elbow over the bracket as shown in **Fig 10.4**.

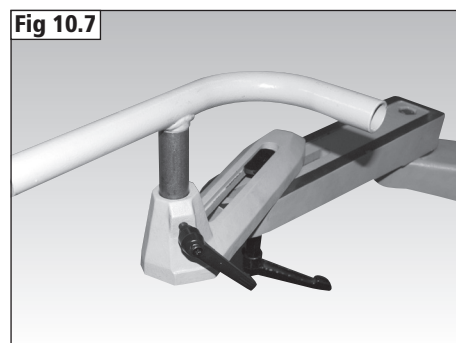
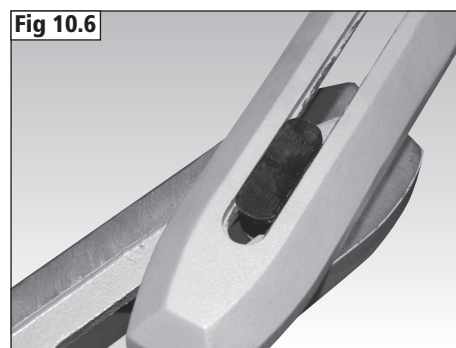
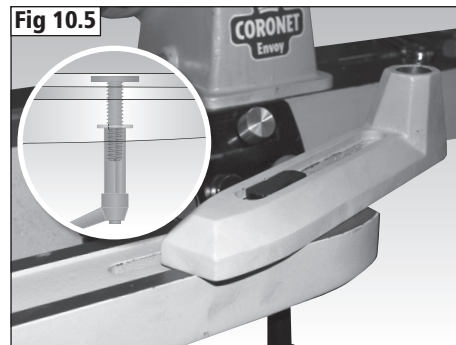
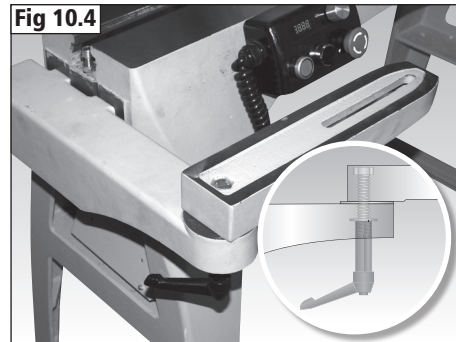
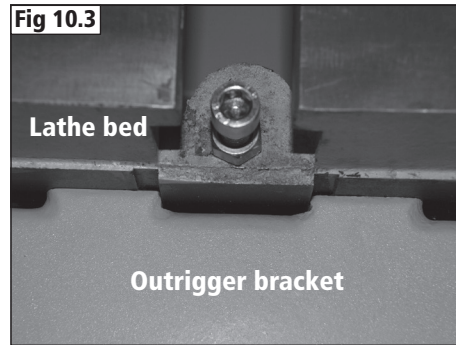
Secure in place by passing the M12 x 80 screw through the top of the elbow and threading into a large ratchet handle as shown in **Fig 10.4**. Place a washer onto the screw before attaching the ratchet handle.

Place the tool rest holder onto the elbow as shown in **Fig 10.5** and secure in place using the tool rest holder screw, large ratchet handle and large washer as shown.

Ensure the tool rest holder screw is located inside the recess as shown in **Fig 10.6**.

Attach the tool rest holder ratchet handle as shown in **Fig 10.7**.

Place the tool rest inside the holder and secure in place using the ratchet handle.



11. Operation

Using the Faceplate

The Coronet Envoy and Regent are supplied with an 82 mm ($3\frac{3}{16}$ ") 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 82 mm diameter circle from the centre of the blank.

Place the faceplate over the scribed circle and attach it to the blank using 4 wood screws as shown in **Fig 11.3**. The length of wood screws 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 onto the lathe spindle as shown in **Fig 11.4**.

When beginning to turn the bowl, proceed with caution and ensure the blank is securely held to the faceplate.

For further details on using the faceplate please refer to the **Intended use of the Lathe and Basic Woodturning Instructions** chapter of the manual.



Before inserting tapered attachments into the headstock or quill 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 soft-headed mallet.

Fitting the 4-Prong Drive Centre to the Headstock

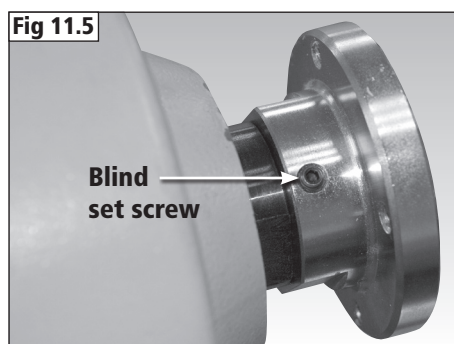
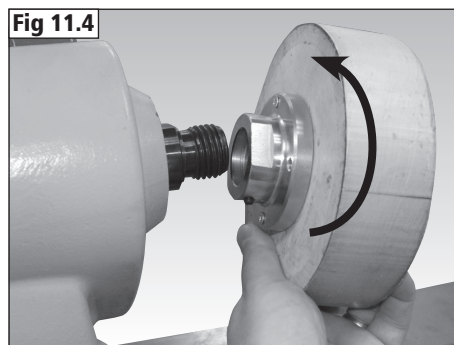
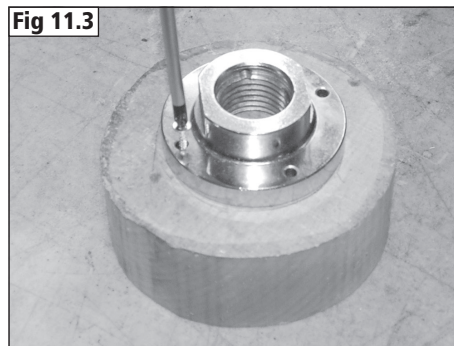
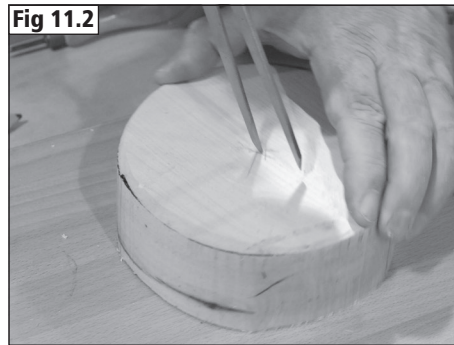
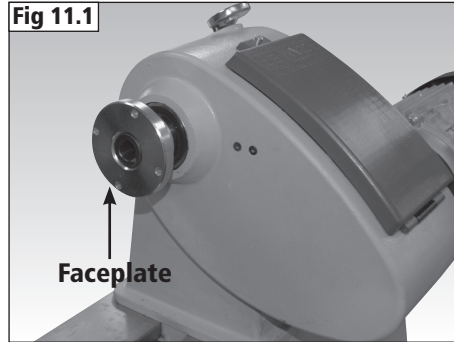
When turning between centres, the 4-prong drive centre should be used in conjunction with the revolving centre. For details on turning between centres, please refer to the **Intended use of the Lathe and Basic Woodturning Instructions** chapter of the manual.

Before fitting the drive centre it is advisable to remove the faceplate as it may cause an obstruction when turning.



The faceplate features a blind set screw as shown in Fig 11.5. Its purpose is to secure the faceplate to the spindle when the lathe is operating in reverse. It must be removed before removal of the faceplate to avoid damage to the spindle thread.

Remove the blind set screw from the faceplate using a 3 mm hex wrench.



11. Operation

Firmly hold the hand wheel and turn the face plate anti-clockwise to remove as shown in **Fig 11.6**.

Insert the drive centre into the headstock spindle, **Fig 11.7**.

Removing the 4-Prong Drive Centre from the Headstock

The operating bar is used to remove the drive centre from the headstock spindle. Place it into the hole positioned centrally in the hand wheel, at the opposite side of the headstock from the drive centre and give the drive centre a sharp knock to dislodge it, **Fig 11.8**.

It is advisable to hold the drive centre to eliminate the risk of it being ejected with force and causing injury.

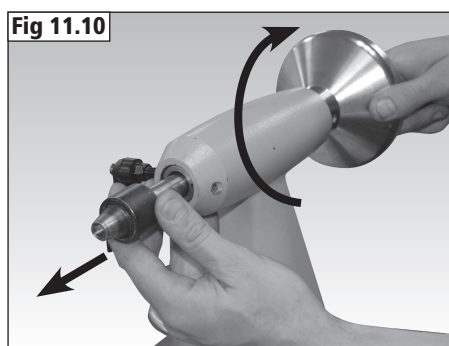
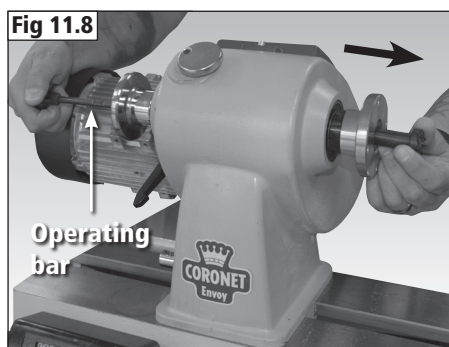
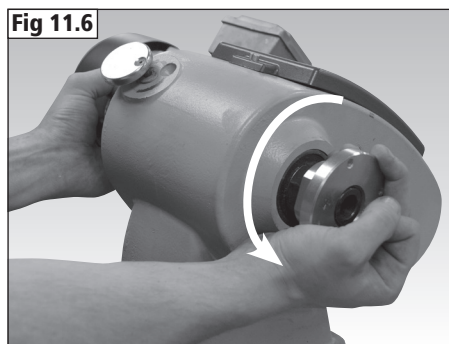
Fitting the Revolving Centre to the Tailstock

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 quill as shown in **Fig 11.9**.

To adjust the position of the quill use the hand wheel at the rear of the tailstock, **Fig 11.10**. The quill can be locked in position using the quill locking lever.

To remove the live centre from the tailstock turn the hand wheel anti-clockwise until the quill pushes the live centre out as shown in **Fig 11.10**.



11. Operation

Adjusting the Tool Rest

To move the tool rest across the lathe bed, loosen the tool rest holder locking lever by turning it anti-clockwise, 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 the tool rest as required and re-tighten, **Fig 11.11**.

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 11.12**.

To adjust the quill position, loosen the quill locking lever and turn the hand wheel. When the quill is in the desired position, re-tighten the locking lever, **Fig 11.12**.

Adjustment of the Clamping Action of the Tool Rest Holder

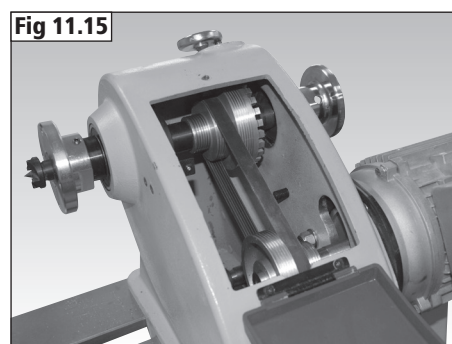
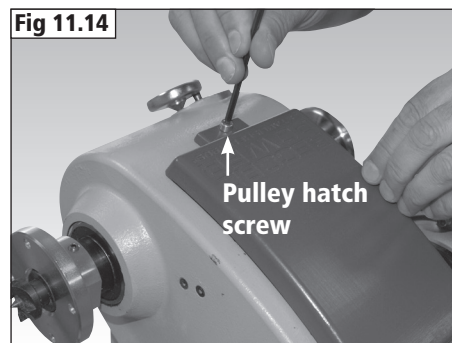
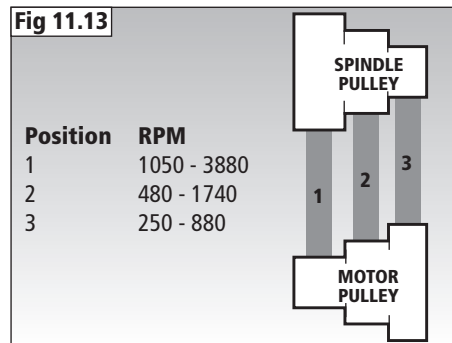
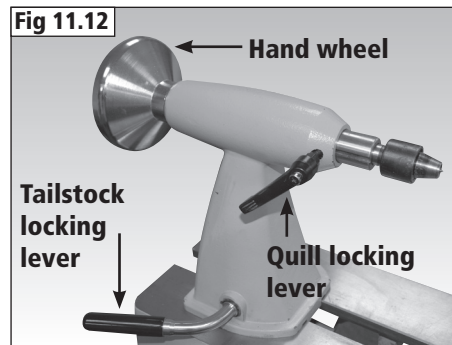
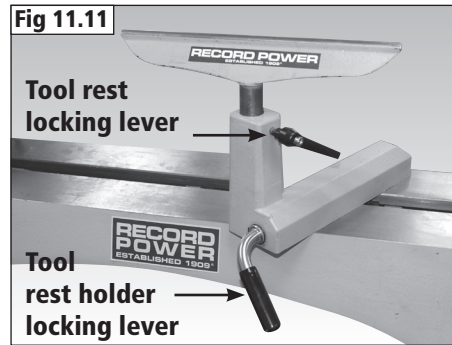
If movement of the tool rest holder or tailstock is unsatisfactory, either due to being too stiff and difficult to move or too easy to move and giving inadequate locking, the clamping action can be adjusted. Please see the maintenance section of the manual for full details.

Stiffness may also be caused by timber residue or other debris on the lathe bed.

Changing the Spindle Speed

The Envoy and Regent feature a 3 step pulley system. The drive belt should be positioned on the corresponding pulleys as shown in **Fig 11.13** to achieve the speed range required.

Using a 4 mm hex wrench loosen the pulley hatch screw as shown in **Fig 11.14** and open the pulley cover as shown in **Fig 11.15**.



11. Operation

Loosen the motor tension lever and raise the motor to its highest position, **Fig 11.16**, and re-tighten to hold the motor in place. The drive belt will now be loose enough to move, **Fig 11.17**.

Place the belt in the desired position, release the tension lever and carefully lower the motor. Turn the hand wheel by hand to check the grooves of the belt and pulleys are located correctly, **Fig 11.18**.

The weight of the motor should give sufficient tension to the drive belt. Once the motor has been lowered, tighten the tension lever. If the belt slips during operation it may be necessary to apply a little more tension.

Indexing

Indexing is a useful feature of the Coronet Enjoy and Regent, allowing accurate pattern work on projects such as straight fluting, grooving, drilling, lay out and more.



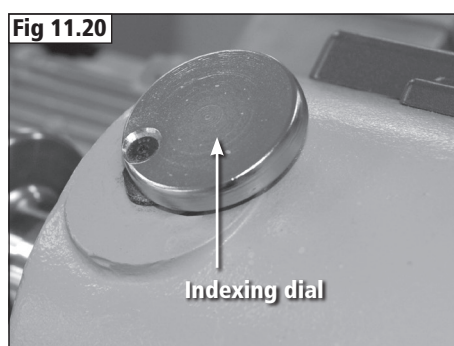
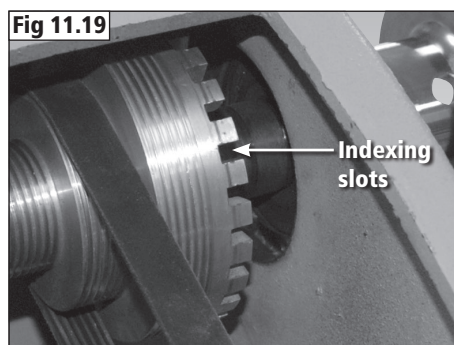
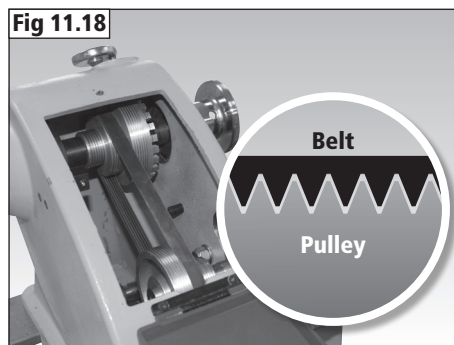
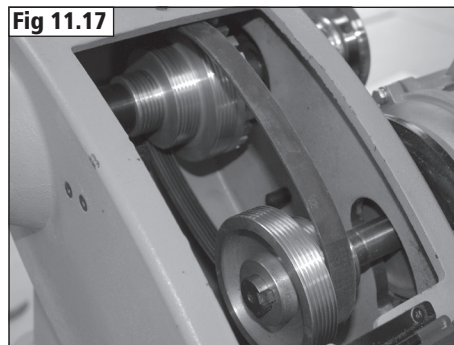
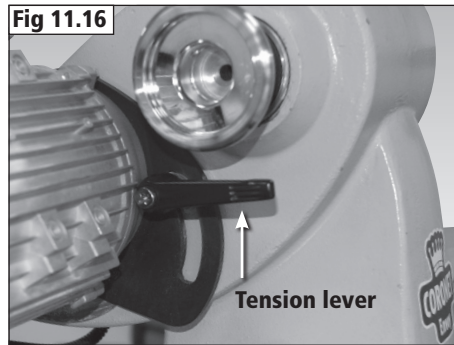
The indexing system must only be used when the lathe is stationary and the power is turned off.

The indexing system must not be used as a method of holding the spindle when removing accessories such as faceplates and chucks. Damage caused to the machine by doing so is not covered by the warranty.

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

The 24 position indexing system is located inside the headstock as shown in **Fig 11.19**. The indexing slots are spread evenly around the circumference of the spindle pulley in 15° increments.

Engage the spindle lock by rotating the indexing dial until it locates in the recess beneath as shown in **Fig 11.20**.



11. Operation

Disengage the spindle lock by lifting the indexing dial and rotating to a position where it is not located in the recess then lowering, **Fig 11.21**.

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 also the spindle index positions to use.

Operating the Lathe

Before turning the lathe on, ensure the off switch has been rotated clockwise and is in the raised position.

To turn the lathe on, press the on switch as shown in **Fig 11.22**.

To turn the lathe off, press the off switch.

To cut off power from the control box, press the off switch on the electrical enclosure box as shown in **Fig 11.23**.

To supply power to the control box, press the on switch on the electrical enclosure box as shown in **Fig 11.23**.

To adjust the speed ensure the drive belt is placed in the correct position to achieve the required speed, **Fig 11.13**. Use the speed control dial to adjust the speed of the lathe within the range allowed by the drive belt position. The speed of the lathe spindle is shown on the speed readout.

To run the lathe in the standard **forward** direction, turn the forward / reverse selector **anti-clockwise**.

To run the lathe in **reverse**, turn the forward / reverse selector **clockwise**.



WARNING

Extreme caution must be exercised when turning in reverse as not all lathe accessories are designed to be used for reverse turning. Always ensure accessories are suitable for this use and that all relevant securing items (such as blind set screws) are fitted 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 lathe 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 off 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.

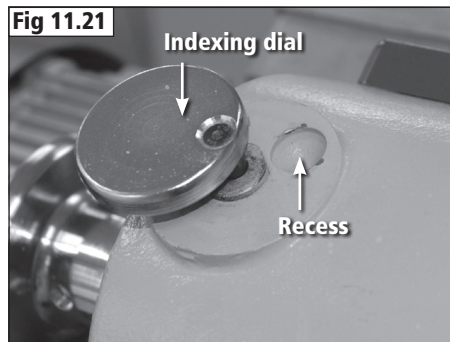
To re-start the machine, press the on switch.

In the Event of a Power Failure

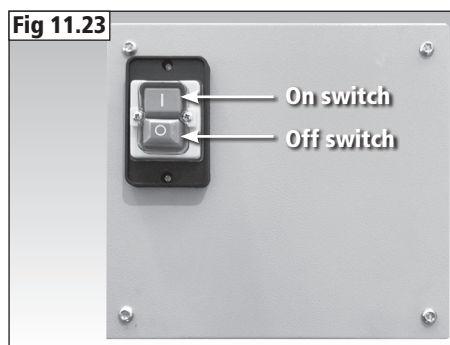
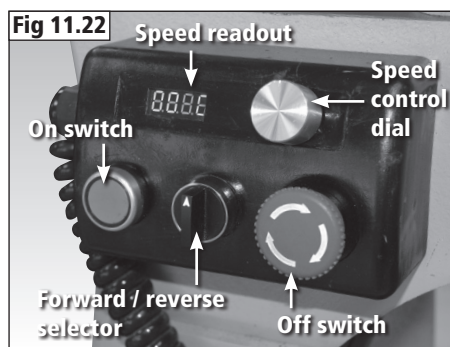
The lathe is fitted with a no volt release (NVR) switch to protect the user against automatic starting of the machine when power is restored after a power failure.

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 on switch.



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



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 Clamping Action of the Tool Rest Holder, Tailstock and Headstock

If movement of any of these items 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.

Remove the required item from the lathe bed by loosening the locking mechanism and sliding it off the bed.

On the underside of the item is a bolt with a nylon locking nut which holds the clamp in place, **Fig 12.1** (tool rest holder illustrated).

If the clamping action is too low, turn the nut clockwise with 16 mm wrench and re-fit the tool rest holder to the lathe.

If the clamping action is too high, turn the nut anti-clockwise and re-fit the tool rest holder to the lathe.

Stiffness may also be caused by timber residue or other debris on the lathe bed.

Changing the Belt



The machine must be unplugged and the power switch must be in the OFF position when carrying out this procedure. When replacing the belts it is recommended to change all 3 bearings at the same time as damage to them may occur during this process.

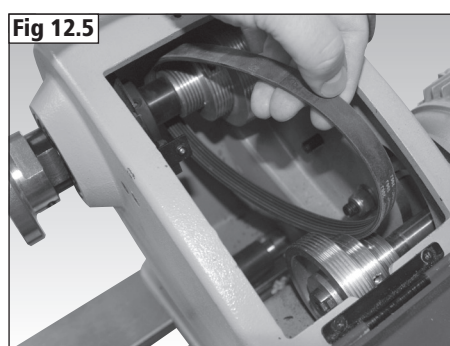
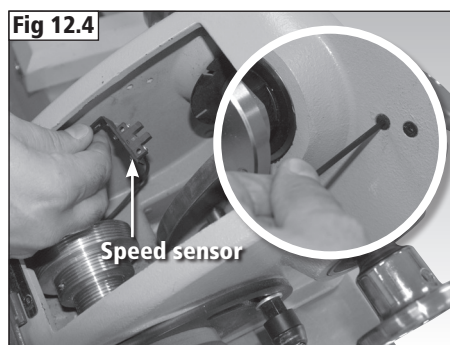
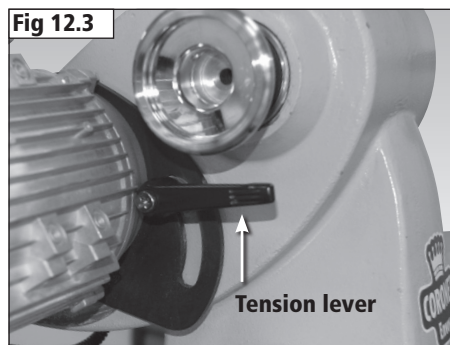
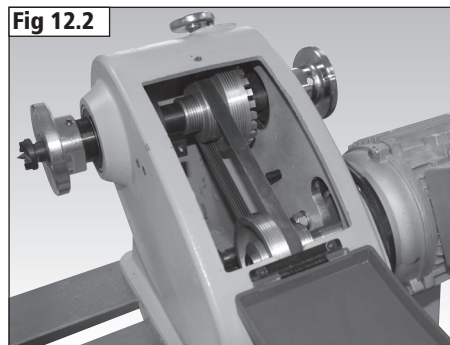
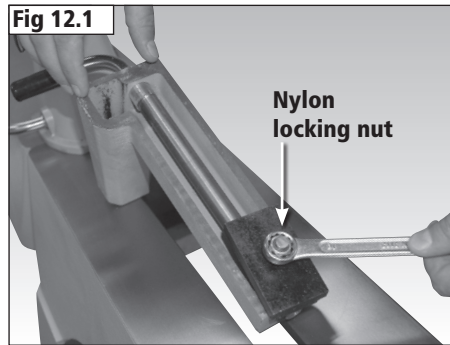
Open the pulley cover to access the pulley assembly inside the headstock, **Fig 12.2**.

Lift the motor to its highest position to loosen the belt and lock in place using the tension lever as shown in **Fig 12.3**.

Before the belt can be changed the speed sensor must be removed from inside the headstock.

Remove the two hex head screws on the outside of the headstock using a 2.5 mm hex wrench as shown in **Fig 12.4**.

Carefully remove the sensor and place away from the spindles and pulleys. Remove the belt from the motor pulley as shown in **Fig 12.5**.



12. Maintenance

To remove the belt from the spindle pulley the spindle must be detached from the headstock.

The spindle assembly is shown in **Fig 12.6**.

Remove the circlip shown in **Fig 12.7** from the outside of the headstock using circlip pliers.

Remove the two blind set screws of the sensor plate using a 3 mm hex wrench as shown in **Fig 12.8**.

The spindle pulley features 4 blind set screws as shown in **Fig 12.9**. In each position there are 2 screws. Remove all 4 screws from the pulley.

The sensor plate and pulley are now loose on the spindle, reducing risk of damage when the spindle is removed.

Remove the hand wheel by unscrewing it clockwise.



NOTE: The hand wheel features a left-hand thread.

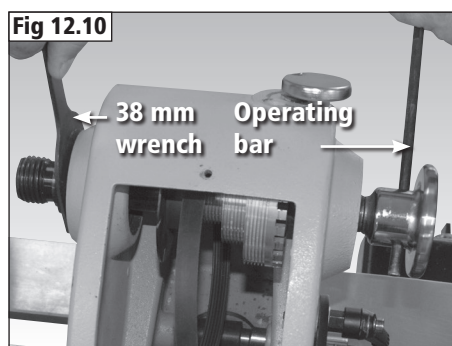
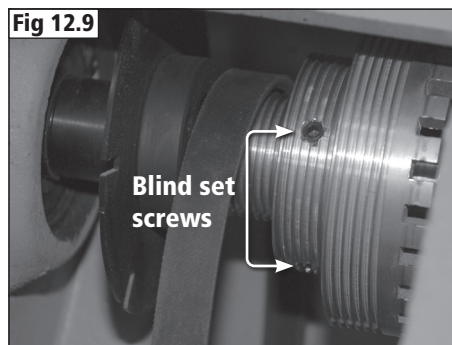
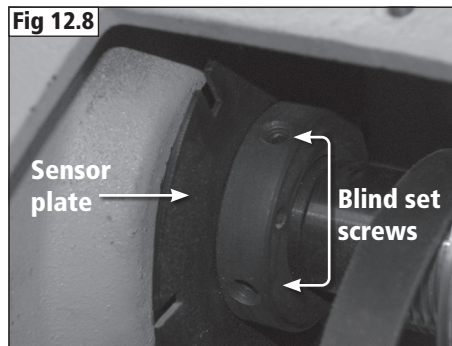
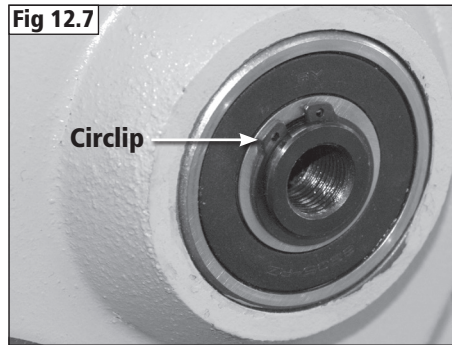
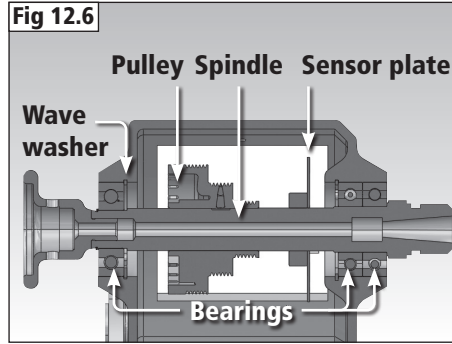
It may be necessary to hold the spindle in place using the 38 mm wrench as shown in **Fig 12.10** and use the operating bar fitted to the hand wheel.

Use a soft-headed mallet to carefully knock the spindle from the headstock housing.

Remove the bearings from the spindle using a bearing press.

Remove the bearing from the head stock (located on the same side as the hand wheel) and replace.

Reassemble the spindle assembly, ensuring the sensor plate passes freely through the sensor.



12. Maintenance



CAUTION: When re-fitting the spindle pulley, ensure it aligns with the motor pulley. Misaligned pulleys will wear the drive belt very quickly.

Fig 12.11 shows the pulley misaligned.

Fig 12.12 shows the pulley correctly aligned,

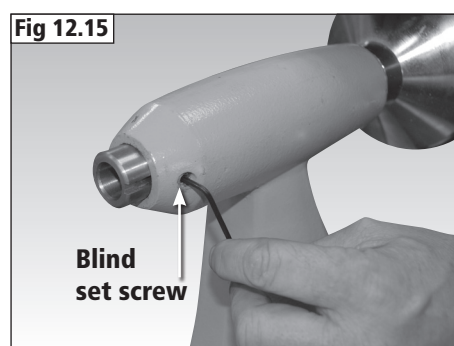
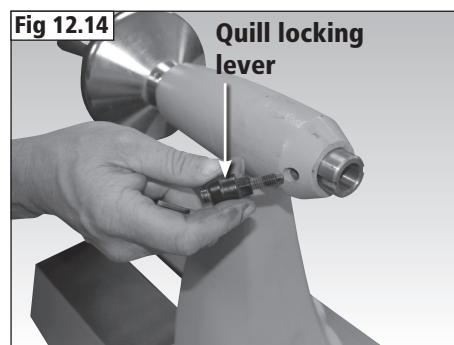
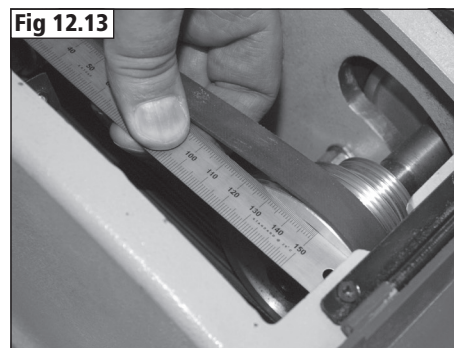
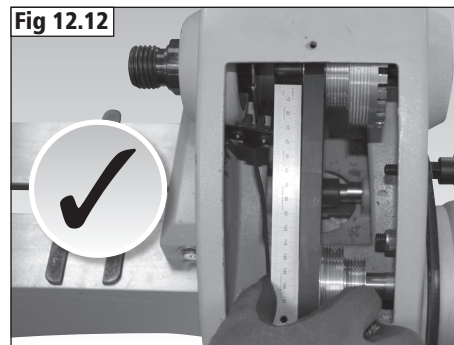
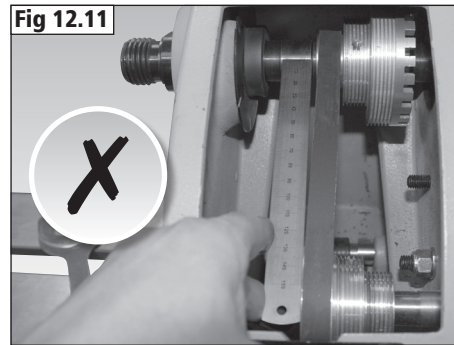
To aid alignment, a rule can be placed flush against the side of the motor pulley as reference for the position of the spindle pulley. See **Fig 12.13**.

The motor can now be locked back in position to place tension on the drive belt.

Cleaning the Tailstock Barrel

Remove the quill locking lever as shown in **Fig 12.14**.

Remove the blind set screw from the tailstock casting as shown in **Fig 12.15** using a 2.5 mm hex wrench.



12. Maintenance

Remove the blind set screw from the hand wheel using a 3 mm hex wrench as shown in **Fig 12.16**.

Remove the quill by pulling it forward out of the tailstock casting as shown in **Fig 12.17**.

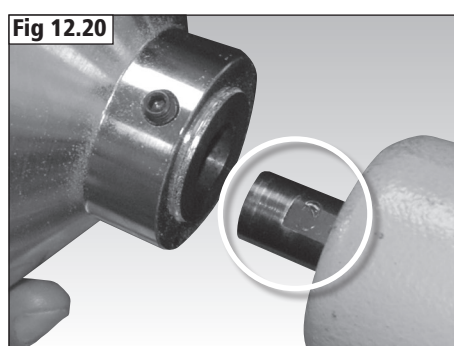
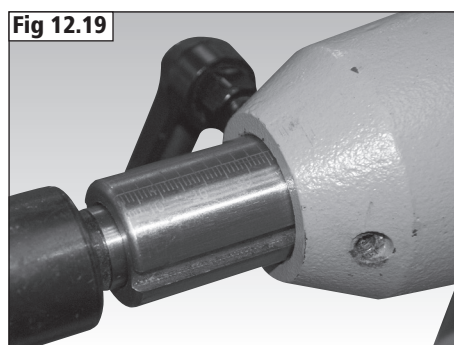
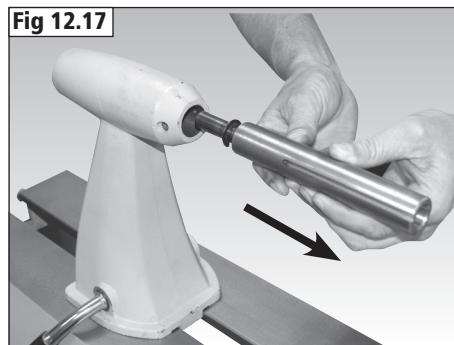
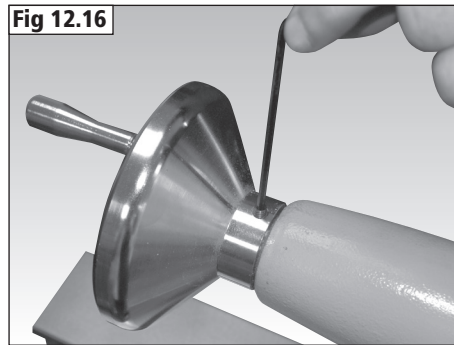
Unscrew the lead screw as shown in **Fig 12.18**.

Remove all debris from the lead screw and quill to ensure optimum performance.

Reassemble the tailstock assembly, ensuring the measurement scale on the quill faces upwards, **Fig 12.19** and the recess is aligned with the blind set screw hole, **Fig 12.20**.



NOTE: When refitting the hand wheel the blind set screw must be located on the flat area of the quill shaft as shown in **Fig 12.19**.



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.

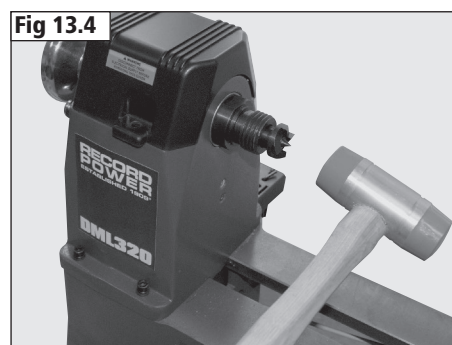
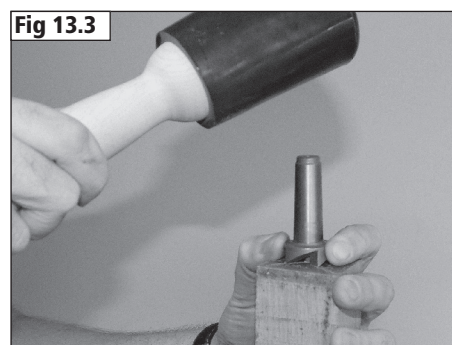
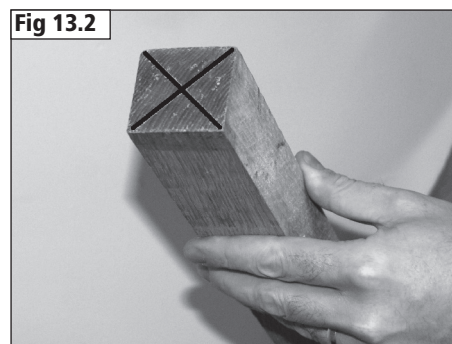
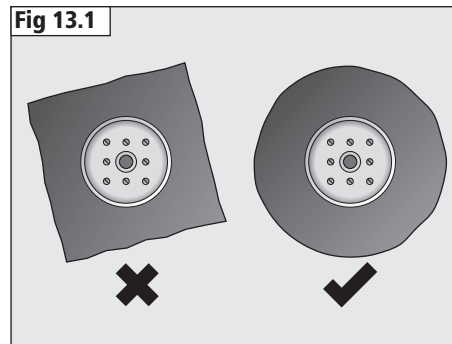
Mounting Timber to a Faceplate or Chuck

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.



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.

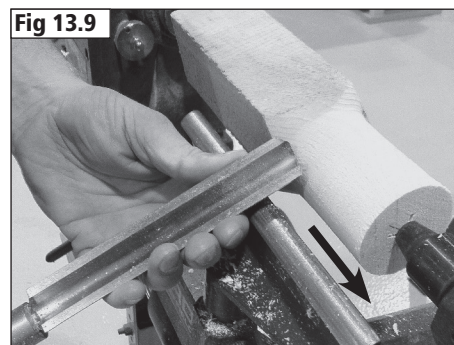
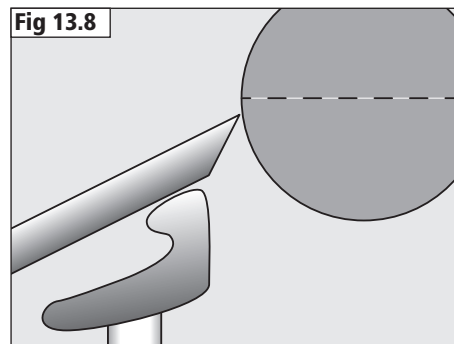
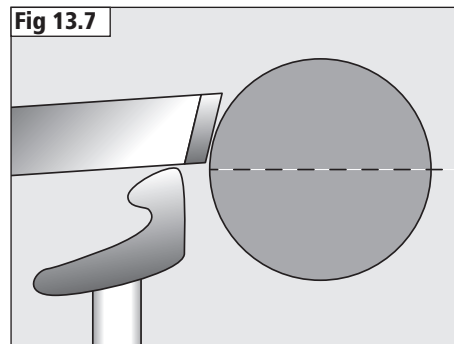
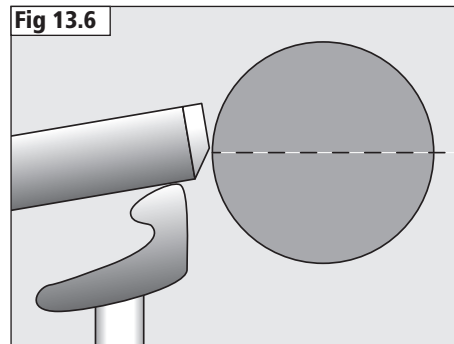
Tool rest height is also important and varies depending on the chisel being used. When using a roughing gouge, the cutting edge should come into contact with the centre of the workpiece, see **Fig 13.6**. If using a skew chisel, the cutting edge should be applied approximately 3/8" (10 mm) above the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



Fig 13.11



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

Suitable dust extraction is essential to avoid the possibility of serious health problems related to wood dust. It is also necessary in order to ensure the waste producing machine performs safely and effectively. Some woods are extremely toxic and in addition to suitable dust extraction machines it is recommended that PPE such as respirators are also used.

Record Power Dust Extraction Machines

Below is a summary of the Record Power range. Please visit your local stockist or go online for full details.

DX1000 Fine Filter 45 Litre Extractor

45 litre capacity, 1 kW motor, 0.5 micron filtration. Includes hose.

RSDE1 Fine Filter 45 Litre Extractor

45 litre capacity, 1 kW motor, 0.5 micron filtration. Includes hose.

RSDE/2 Fine Filter 50 Litre Extractor with Accessories

50 litre capacity, 1 kW motor, 0.5 micron filtration, includes wheel kit, hose cuff power tool adaptor hose and spare filter bags. Includes hose.

RSDE/2A Fine Filter Auto-Switching 50 Litre Extractor with Accessories

50 litre capacity, 1 kW motor, 0.5 micron filtration, includes wheel kit, hose cuff power tool adaptor hose and spare filter bags. Includes hose.

DX4000 Fine Filter Twin Motor 80 Litre Extractor

80 litre capacity, 2 x 1 kW motors, 0.5 micron filtration. Includes hose.

DX5000 Fine Filter Twin Motor 200 Litre Extractor

200 litre capacity, 2 x 1 kW motors, 0.5 micron filtration. Includes hose.

CGV286 CamVac Series Compact Extractor

36 litre capacity, 1 kW motor single or twin, 0.5 micron filtration.

CGV286-WALL CamVac Series Wall Mounted Extractor

150 litre capacity, 1 kW motor single or twin, 0.5 micron filtration.

CGV336 CamVac Series Medium Extractor

55 litre capacity, 1 kW motor single or twin, 0.5 micron filtration.

CGV386 CamVac Series Large Extractor

90 litre capacity, 1 kW motor twin or triple, 0.5 micron filtration.

CGV486 CamVac Series Heavy Duty Extractor

200 litre capacity, 1 kW triple motor, 0.5 micron filtration.

CX2000 Compact Chip Collector

54 litre capacity, 0.56 kW motor. Includes hose.

CX2500 80 Litre Chip Collector

80 litre capacity, 0.55 kW motor. Includes hose.

CX3000 Heavy Duty Chip Collector

128 litre capacity, 0.56 kW motor. Includes hose.

AC400 2 Stage Air filter with Remote, 3 speeds and Time Delay

Collects airborne dust, 1 micron filtration.



Recommended for heavy use



Recommended for light / intermittent use



Can be used

	Bandsaws	Table Saws	Planer Thicknessers	Lathes	Sanding Machines	Dust Extraction Systems	Airborne Dust Collection
DX1000	✓	✓	●	✓	✓		
RSDE1	✓	✓	●	✓	✓		
RSDE/2	✓	✓	●	✓	✓		
RSDE/2A	✓	✓	●	✓	✓		
DX4000	✓	✓	●	✓	✓	✓	
DX5000	✓	✓	●	✓	✓	✓	
CGV286	✓	✓	●	✓	✓		
CGV286-WALL	✓	✓	✓	✓	✓	✓	
CGV336	✓	✓	●	✓	✓		
CGV386	✓	✓	✓	✓	✓	✓	
CGV486	✓	✓	✓	✓	✓	✓	
CX2000	●	●	✓	✓	●		
CX2500	●	●	✓	✓	●		
CX3000	●	●	✓	✓	●		
AC400							✓

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 proper sized 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. 4. Indexing lock is engaged. 	<ol style="list-style-type: none"> 1. Reduce cutting depth. 2. Adjust belt tension or replace drive belt. 3. Replace bearings. 4. Disengage the indexing lock and check the spindle pulley for damage and replace if necessary.
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.
Digital speed readout does not work.	<ol style="list-style-type: none"> 1. Faulty speed readout. 	<ol style="list-style-type: none"> 1. Contact customer services in your country for advice.
Excessive motor noise.	<ol style="list-style-type: none"> 1. Faulty motor. 2. Pulley blind set screw is loose. 	<ol style="list-style-type: none"> 1. Replace motor. 2. Tighten blind set screw.

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:



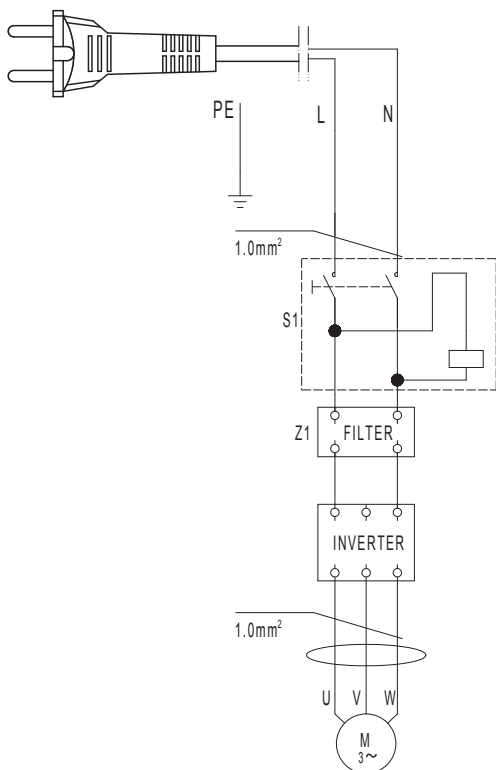
or coloured green / green and yellow.

It is important that the machine is effectively earthed. 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. After inserting the plug into the socket, protection must be provided so that the combination of BS plug and socket will have an IP degree of at least IP44. 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 connector. The wiring for this type of connector is as shown below:

Installation requirement for electrical system:

Electrical system providing a RCD with a maximum residual current of 0.03A should be provided. Installation of over voltage protection is needed.

Steady state voltage: 0.9-1.1 of nominal voltage (230V~).

Frequency: 0.99-1.01 of nominal frequency continuously; 0.98-1.02 short time.

HVF: ≤ 0.02

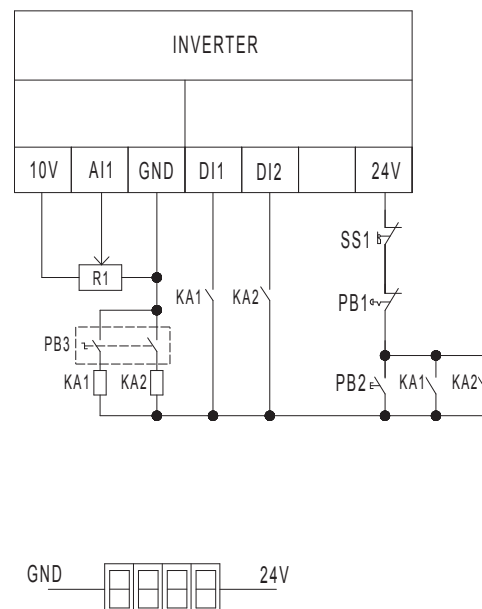
Site Operating Conditions

- a. Altitude are not exceeding 1000m,
- b. Maximum ambient air temperature is +40 °C, minimum ambient air temperature is not less than 0 °C,
- c. Storage and transportation temperature range is -15°C~40°C.
- d. The relative humidity does not exceed 50% at a maximum temperature of +40°C, higher relative humidity may be permitted at lower temperature (e.g. 90%@ 20°C).
- e. The machine can be stored or transported under ambient temperatures between -25°C and +55°C.

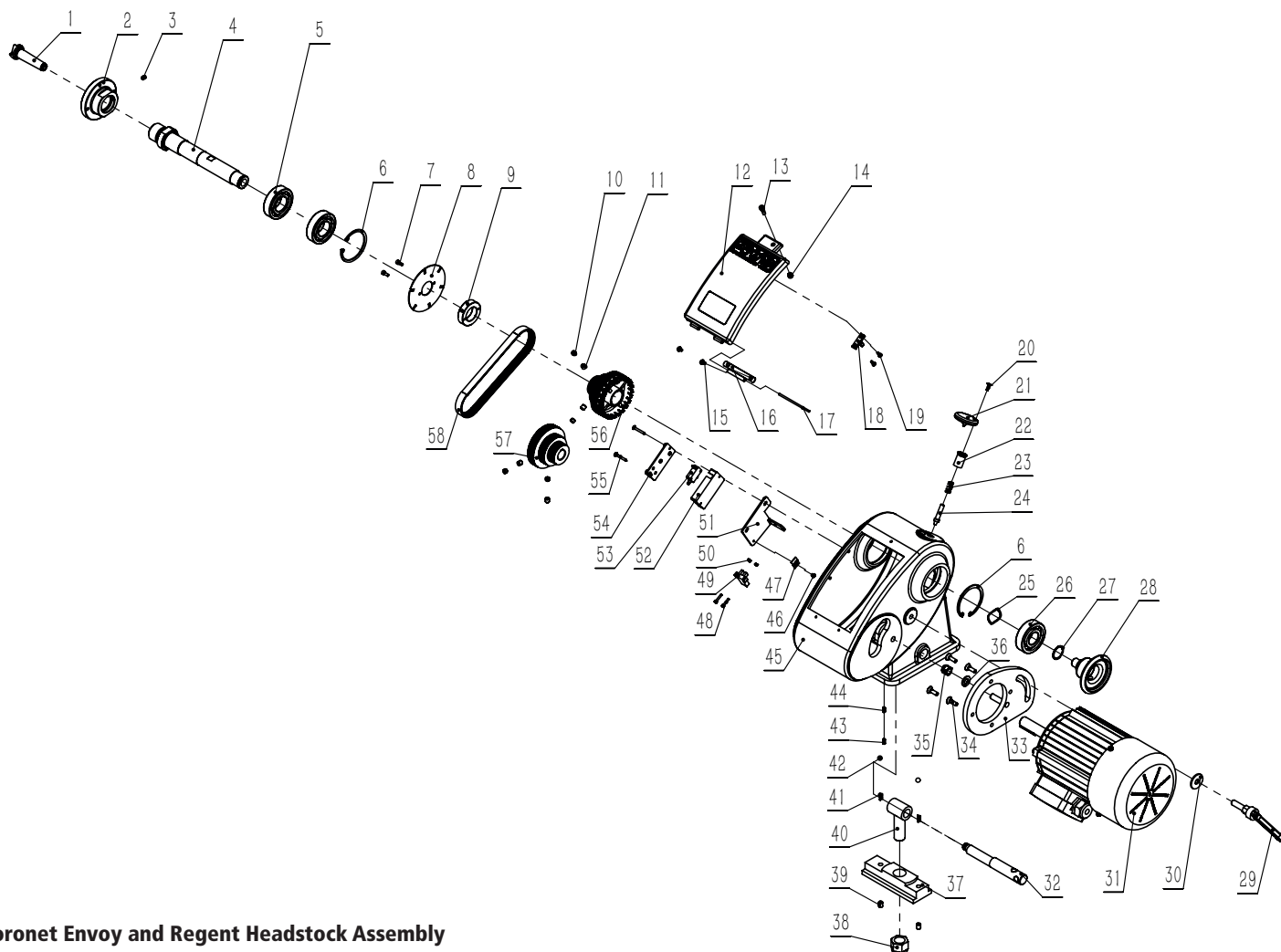
Through poor conditions of the electrical MAINS, shortly voltage drops can appear when starting the EQUIPMENT. This can influence other equipment (e.g. Blinking of a lamp). If the MAINS-IMPEDANCE $Z_{max} < 0.252\Omega$, such disturbances are not expected. (In case of need, you may contact your local supply authority for further information).

Before the machine is connected in TN-S power supply system, the end user shall perform the test according to clause 18.2 of EN 60204-1.

If in doubt about the connection of the electrical supply, always consult a qualified electrician.



17. Parts Lists and Diagrams



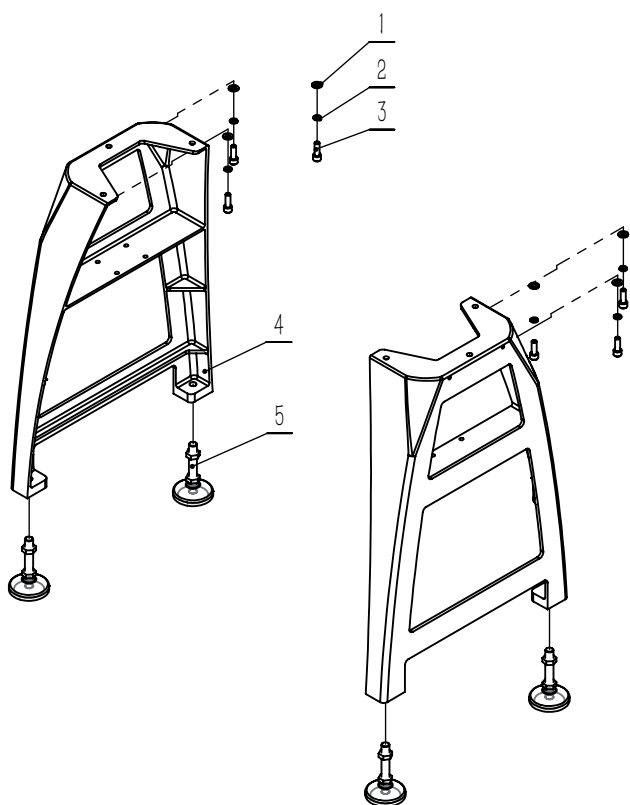
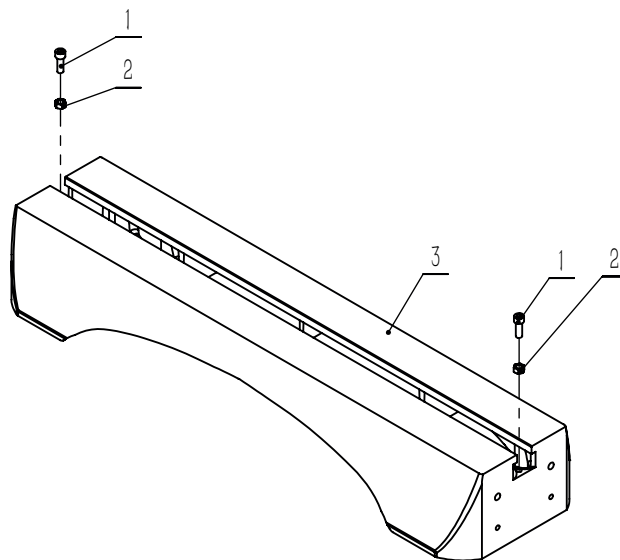
Coronet Envoy and Regent Headstock Assembly

No.	Code	Description	No.	Code	Description
1	JL93011100	Drive centre	31	YSH900154	Motor (Regent)
2	JMWL1203020010A	82 mm (3 3/16") faceplate	32	RCWL1601020014	Locking handle
3	M6X8GB80B	M6 x 8 hexagon set screw	33	RCWL1601020008	Motor plate
4	RCWL1601020002	Spindle	34	M6X20GB70D3Z	M6 x 20 hexagon countersunk head screws
5	BRG6206-2RSGB276	Bearing	35	M10GB889D1ZF	M10 hexagon lock nut
6	CLP62GB893D1B	Circlip	36	WSH10GB97D1Z	Flat washer
7	M4X10GB70D1Z	M4 x 10 hexagon socket head screw	37	RCWL1601020009	Headstock plate
8	RCWL1601020005	Grating	38	M20GB889D2ZF	M20 Hexagon lock nut
9	RCWL1601020011	Speed measuring casing	39	M8X10GB77B	M8 x 10 Hexagon socket set screw
10	M8X8GB80B	M8 x 8 hexagon socket set screw	40	RCWL1601020018	Bushing assembly
11	M8X8GB80B	M8 x 8 hexagon socket set screw	41	JXPS1203023009	Compressed spring
12	RCWL1601020100	Headstock cover	42	JXCM2501021012	Steel ball
13	M5X16GB70D1B	M5 x 16 hexagon socket head screw	43	M5X10GB77B	M5 x 10 hexagon socket set screw
14	M5GB889D1Z	M5 hexagon lock nut	44	M5X10GB79B	M5 x 10 hexagon socket set screw
15	M4X10GB819D1B	M4 x 10 countersunk head screw	45	RCWL1601020001	Headstock (Envoy)
16	JMWL1203020002	Hinge	45	RCWL1801020001	Headstock (Regent)
17	JMWL1203020003	Hinge shaft	46	M4X4GB823Z	M4 x 4 cross pan head screw
18	RCWL1601020017	Top plate	47	1502014-02	Cable plate
19	ST3D5X13GB845Z	Cross recessed pan head tapping screw	48	M3X16GB70D1Z	M3 x 16 hexagon socket cap screw (Envoy)
20	M4X12GB70D3B	M4 x 12 hexagon countersunk head screws	48	M3X16GB70D1B	M3 x 16 hexagon socket cap screw (Regent)
21	RCWL1601020013	Rotary knob	49	RCWL1601090002	Speed sensor
22	RCWL1601020012A	Locating bush	50	M3GB6170Z	M3 hexagon nut
23	RCWL1601020015	Stop spring	51	RCWL1601020006	Speed measuring plate
24	RCWL1601020010A	Pin shaft	52	JMBS0901010016	Micro switch base
25	WSH62JB7590B	Spring washer	53	KW3-0Z-2B	Micro switch
26	BRG6305-2RSGB276	Bearing	54	RCWL1601020016	Micro switch cover
27	CLP25GB894D1B	Circlip	55	RCWL1601020020	Countersunk head tapping screws
28	RCWL1201020013	Handle wheel	56	RCWL1601020003	Spindle pulley
29	KTSB-1-B-M10X80X25	Ratchet handle	57	RCWL1601020007	Motor pulley
30	WSH10GB96D1Z	Big washer	58	6PJ510GB16588	Drive belt
31	YSH800114	Motor (Envoy)			

17. Parts Lists and Diagrams

Coronet Envoy and Regent Bed Assembly

No.	Code	Description
1	M10X30GB70D1Z	M10 x 30 hexagon socket head screw
2	M10GB6170Z	M10 hex nut
3	RCWL1601010001	Lathe bed

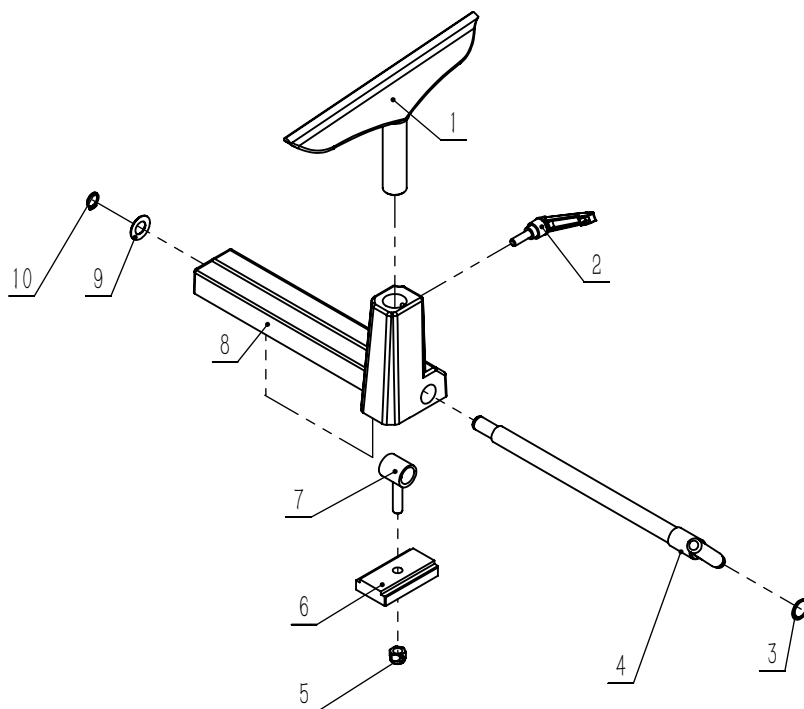


Coronet Envoy and Regent Leg Stand Assembly

No.	Code	Description
1	WSH10GB97D1Z	Flat washer
2	WSH10GB93Z	Spring washer
3	M10X30GB70D1Z	M10 x 30 hexagon socket head screw
4	RCWL1601101007	Stand
5	WL3040A100102	Adjustable feet

Coronet Envoy and Regent Tool Rest Assembly

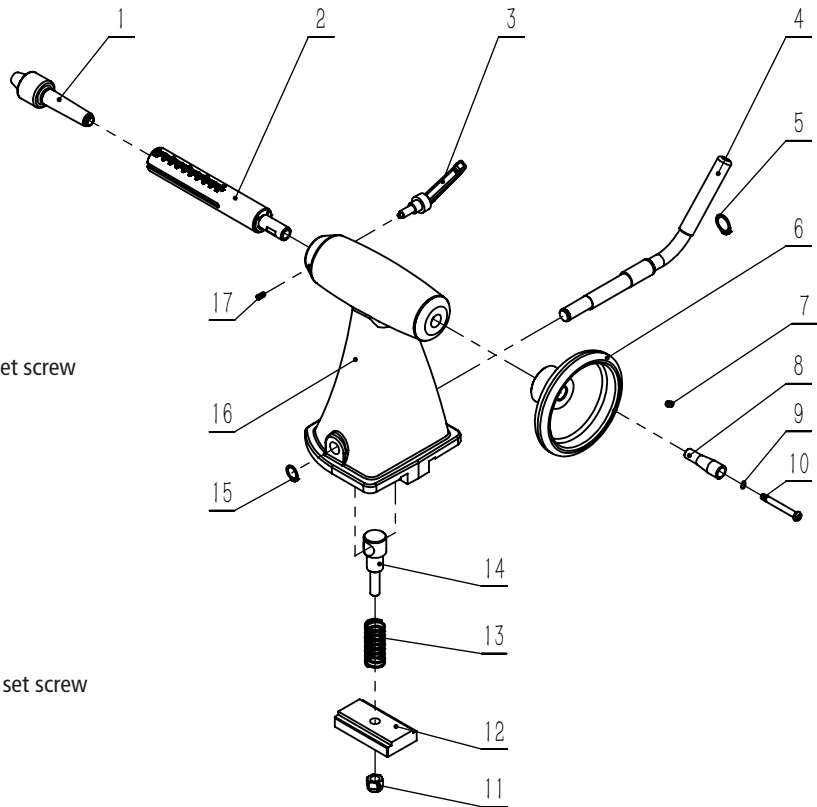
No.	Code	Description
1	JMWL1203050001B	Tool rest
2	KTSB-1-B-M8X63X25	Adjusting handle
3	CLP21GB894D1B	Circlip
4	RCWL1801050002	Cam lock handle
5	M10GB889D1ZF	M10 hexagon lock nut
6	RCWL1601040004	Tool rest clamp
7	JMWL1203050002	Locking tube
8	RCWL1801050001A	Tool rest base
9	BRG1528AXKASGB4605-2	Bearing washer
10	CLP15GB894D1B	Circlip



17. Parts Lists and Diagrams

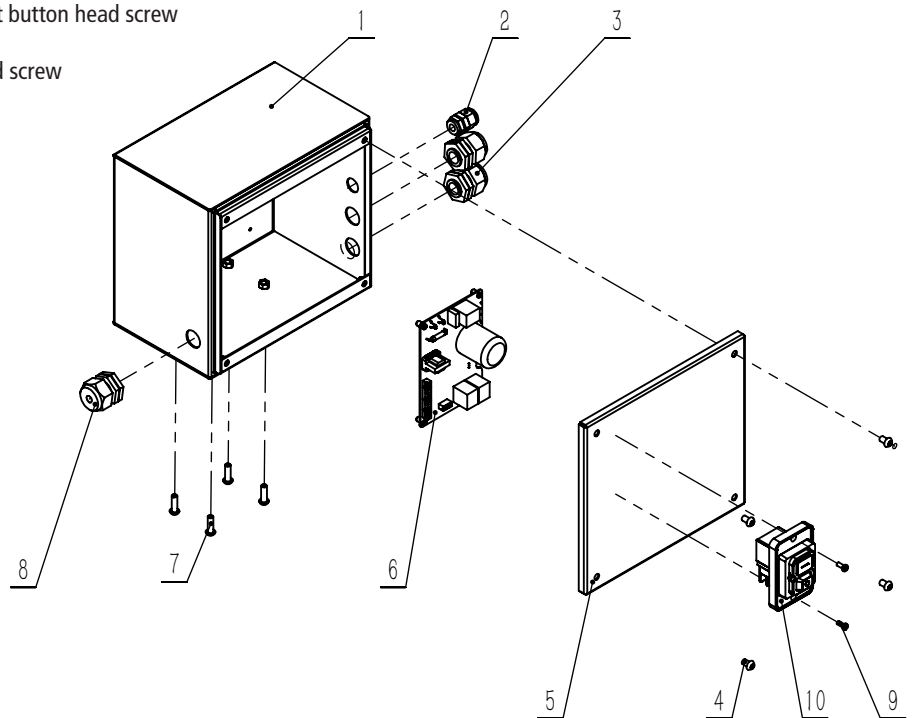
Coronet Envoy and Regent Tailstock Assembly

No.	Code	Description
1	JL93031000A	Revolving centre
2	JMWL1203041100	Tailstock barrel
3	JMWL1203041000	Ratchet handle
4	RCWL1601040002	Cam lock handle
5	CLP18GB894D1B	Circlip
6	ZTSL-D120-d15A	Tailstock hand wheel
7	M6X8GB80B	M6 x 8 Hexagon socket set screw
8	JL93030007	Hand wheel handle
9	JMWL1203040007	Spring washer
10	JL93030008	Screw
11	M10GB889D1ZF	M10 Hexagon lock nut
12	RCWL1601040004	Tailstock clamp
13	JL93030011	Compression spring
14	RCWL1601040003	Bolt
15	CLP14GB894D1B	Circlip
16	RCWL1601040001	Tailstock (Envoy)
16	RCWL1801040001	Tailstock (Regent)
17	M5X10GB79B	M5 x 10 Hexagon socket set screw



Coronet Envoy Electrical Enclosure Box Assembly

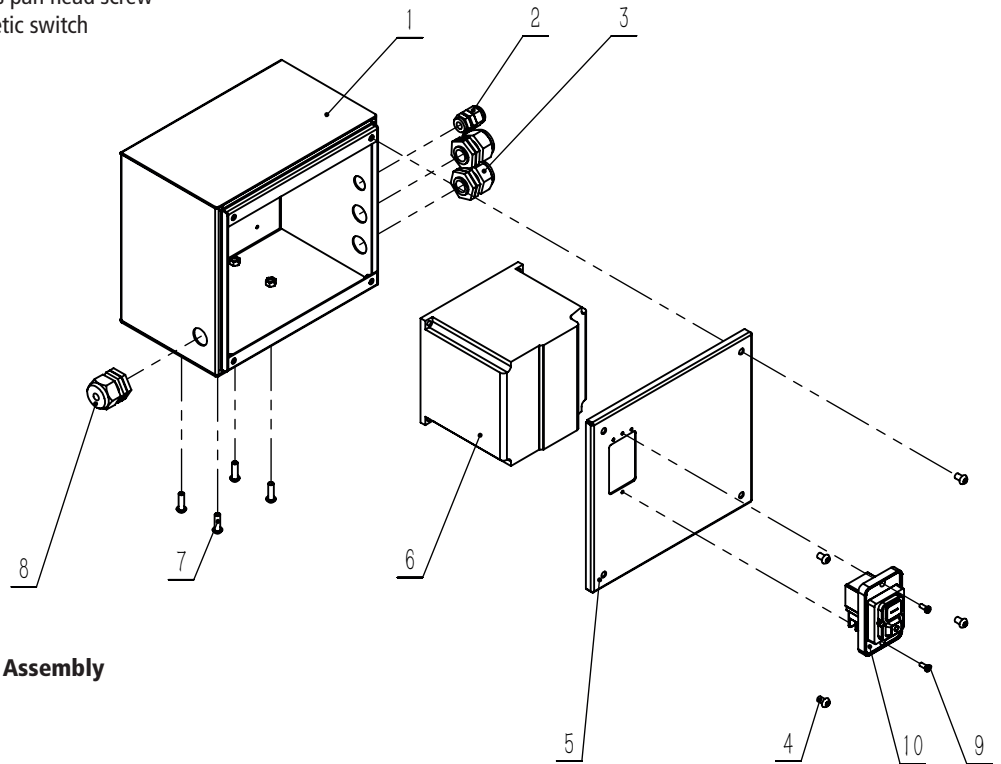
No.	Code	Description
1	RCWL1601092100	Controller box
2	ADD15D8	Bellows joint (M16)
3	JL91046100	M20 Cable gland
4	RCWL1601090003	Pan head club screw
5	RCWL1601090001	Cover plate
6	RCWL1601092200	Transducer (Envoy)
7	M6X20GB70D2Z	M6 x 20 hexagon socket button head screw
8	JL91046100A	M20 cable gland
9	M4X10GB823Z	M4 x 10 cross pan head screw
10	KJD12-10F-230V	Electromagnetic switch



17. Parts Lists and Diagrams

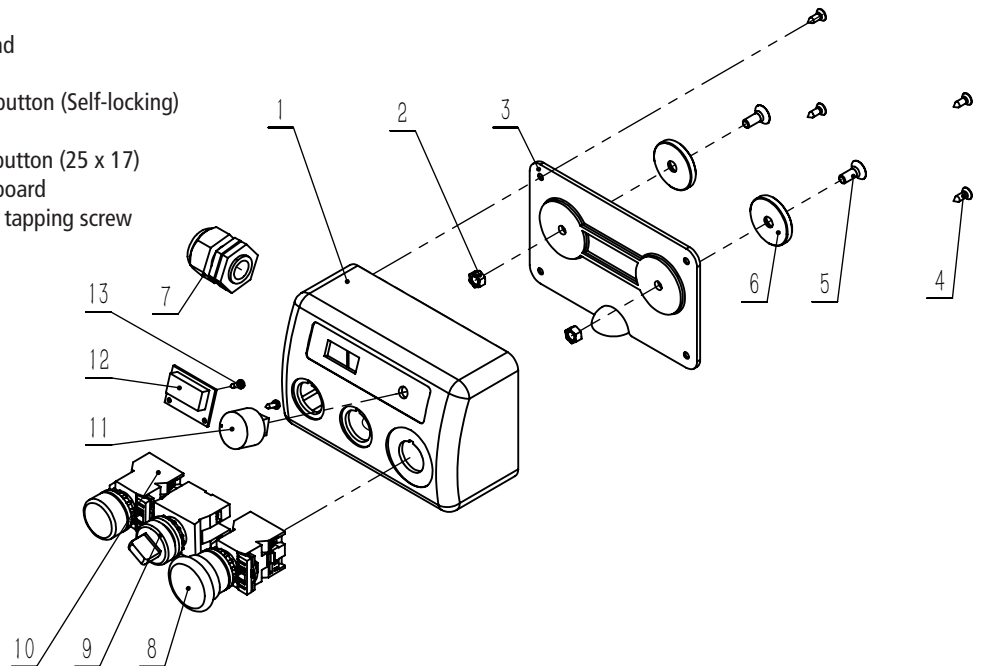
Coronet Regent Electrical Enclosure Box Assembly

No.	Code	Description
1	RCWL1601092100	Controller box
2	ADD15D8	Bellows joint (M16)
3	JL91046100	M20 cable gland
4	RCWL1601090003	Pan head club screw
5	RCWL1601090001	Cover plate
6	DV1-128D0FB-C20C	Transducer
7	M6X20GB70D2Z	M6 x 20 Hexagon socket button head screw
8	JL91046100A	M20 Cable gland
9	M4X10GB823Z	M4 x 10 cross pan head screw
10	KJD12-10F-230V	Electromagnetic switch

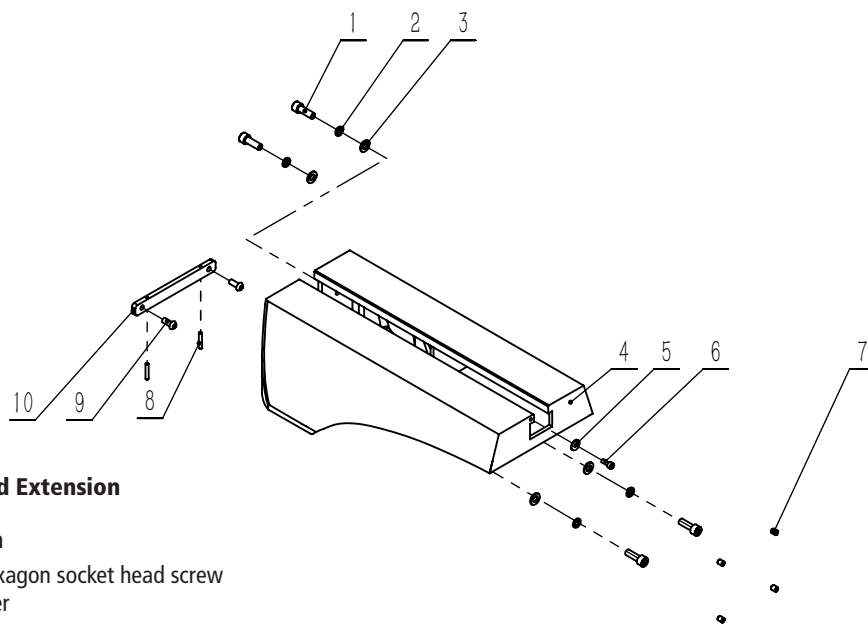


Coronet Envoy and Regent Control Unit Assembly

No.	Code	Description
1	RCWL1601091001-001S	Switch box
2	M6GB6170Z	M6 hex nut
3	RCWL1601091002-001S	Switch cover
4	ST4D2X13GB846Z	Countersunk head tapping screw
5	M6X16GB70D3Z	M6 x 16 hexagon countersunk head screw
6	JXP51201052010	Steel magnet
7	JL91046100A	M20 Cable gland
8	LA39-B2-R02Z-R	Stop button
9	PB1S-20XS6-k	Three-position button (Self-locking)
10	LA39-B2-10-g	Start button
11	RCWL1601091003	Potentiometer button (25 x 17)
12	JMWL1203090008A	Digital display board
13	ST2D9X9D5GB845Z	Cross pan head tapping screw

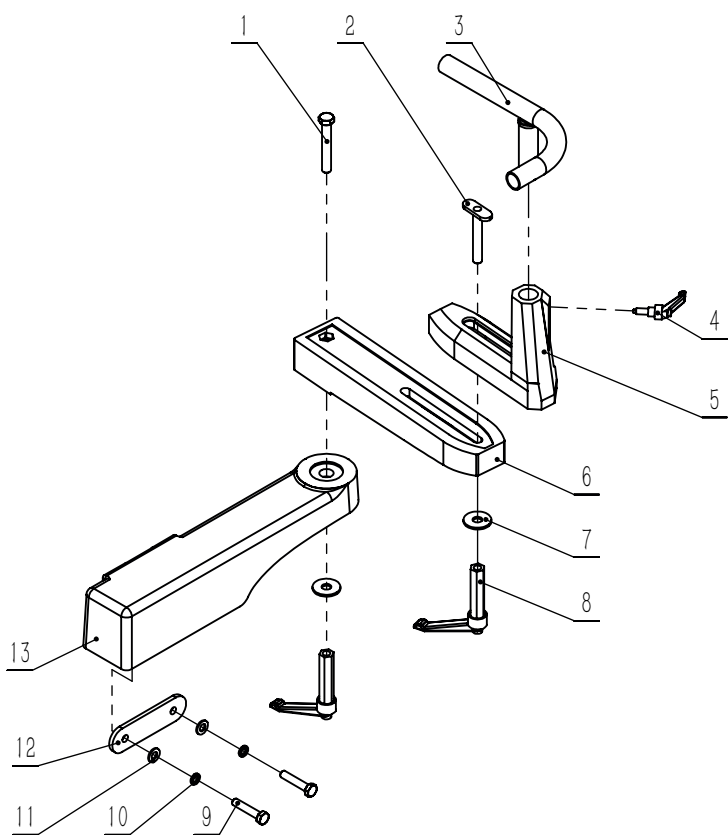


17. Parts Lists and Diagrams



Coronet Envoy and Regent Optional Bed Extension

No.	Code	Description
1	M10X30GB70D1Z	M10 x 30 hexagon socket head screw
2	WSH10GB93Z	Spring washer
3	WSH10GB97D1Z	Flat washer
4	RCWL1601030001	Extension bed
5	WSH6GB96D1Z	Large washer
6	M6X16GB70D1Z	M6 x 16 hexagon socket head screw
7	M8X10GB77B	M8 x 10 hexagon socket set screw
8	M5X25GB77B	M5 x 25 hexagon socket set screw
9	M8X20GB70D2Z	M8 x 20 hexagon socket button head screws
10	RCWL1601030002	Supporting plate



Coronet Envoy and Regent Optional Outrigger

No.	Code	Description
1	M12X80GB5783Z	M12X80 Hexagonal head bolt
2	RCWL1601050003	T-Type bolt
3	RCWL1201030100	Tubular bowl rest
4	JMWL1203041000	Ratchet handle
5	RCWL1601050004	Tool rest bracket
6	RCWL1201030004	Supporting seat
7	WSH12GB96D1Z	Big washer
8	RCWL1201030008	Ratchet handle
9	M10X50GB5783Z	M10 x 50 Hexagonal head bolt
10	WSH10GB93Z	Spring washer
11	WSH10GB97D1Z	Flat washer
12	RCWL1601050002	Locking plate
13	RCWL1601050001	Extension bracket

EU Declaration of Conformity

Cert No: EU / Coronet Envoy and Coronet Regent / 1

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

- 1. Type: **Wood Lathe**
- 2. Model No: **Coronet Envoy and Coronet Regent**
- 3. Serial No

Will conform with the following standards:

- MACHINERY DIRECTIVE 2006/42EC

- ADDITIONAL USED EC DIRECTIVES: EMC Directive 2014/30/EU

- USED HARMONIZED STANDARDS: EN 60204-1:2018
 EN ISO 12100: 2010
 EN 55014-1:2017
 EN 55014-2:2015
 EN 61000-3-2: 2014
 EN 61000-3-3: 2013

and complies with the relevant essential health and safety requirements and conforms to the machinery example for which the EC Type-Examination Certificate Numbers **AE50443426 0001** and **AM50442976 0001** has been issued.



Signed.....Dated: **01/01/2021**

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

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Support • Expertise

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