

# Original Instruction Manual

## MAXI-1 Heavy Cast Iron Swivel Head Variable Speed Lathe

Version 3.2  
January 2015



To register this product please visit  
**[www.recordpower.info](http://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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# 1.1 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

# 1.2 General Health & 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

# 1.2 General Health & Safety Guidance

complete stop.

- If the work area is to be left unattended, all machinery should be switched 'OFF' and isolated from the mains power supply.

## 13. Store machines safely when not in use

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

## 14. Do not overreach

- Choose a working position that allows your body to remain balanced and feed the work piece 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 2.5 mm<sup>2</sup> 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

# 1.2 General Health & Safety Guidance

determine that it will operate properly and perform its intended function.

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

## 31. Warning!

- The use of any accessory or attachment, other than those recommended in this instruction manual, or recommended by our Company may present

a risk of personal injury or damage to the machine and invalidation of the warranty.

## 32. Have your machine repaired by a qualified person

- This machine complies with the relevant safety rules and standards appropriate to its type when used in accordance with these instructions and with all 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.

# 1.3 Additional Health & Safety 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 & Basic Woodturning Instructions**.
- Adjust the tool rest to the correct height and distance from the work piece and check that all fixings are secure.
- Check that the size of the work piece is within the safe working capacities of the lathe as detailed in the manual.
- Select the correct speed according to the size and type of work piece. The slowest speed is the safest speed to start any new work piece.
- Always rotate the work piece by hand before starting the lathe to ensure it does not come into contact with the tool rest. If the work piece strikes the tool rest during operation, it could be split and thrown from the lathe.
- When using a faceplate always ensure the work piece is well secured with screws of a suitable diameter and length.
- Remove any loose knots and bark from the work piece before mounting it to the lathe.
- If mounting a work piece between centres, always ensure that the tailstock is correctly adjusted and fully secure. Check that the locking handle for the tailstock barrel is fully tightened.

### 3. Whilst using the lathe

- Do not allow the turning tool to dig in to the work piece, which could result in the work piece splitting or being thrown from the lathe. Always position the tool rest at the correct height. For further instructions please see the section of this manual entitled **Intended Use of the Lathe & 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 & 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 base 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 & Safety at Work etc. Act 1974', and the 'Provision & 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 & Safety Executive and their website [www.hse.gov.uk](http://www.hse.gov.uk) and from the authorised distributor in your country (details on back cover of the manual).

# 1.4 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](http://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](http://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

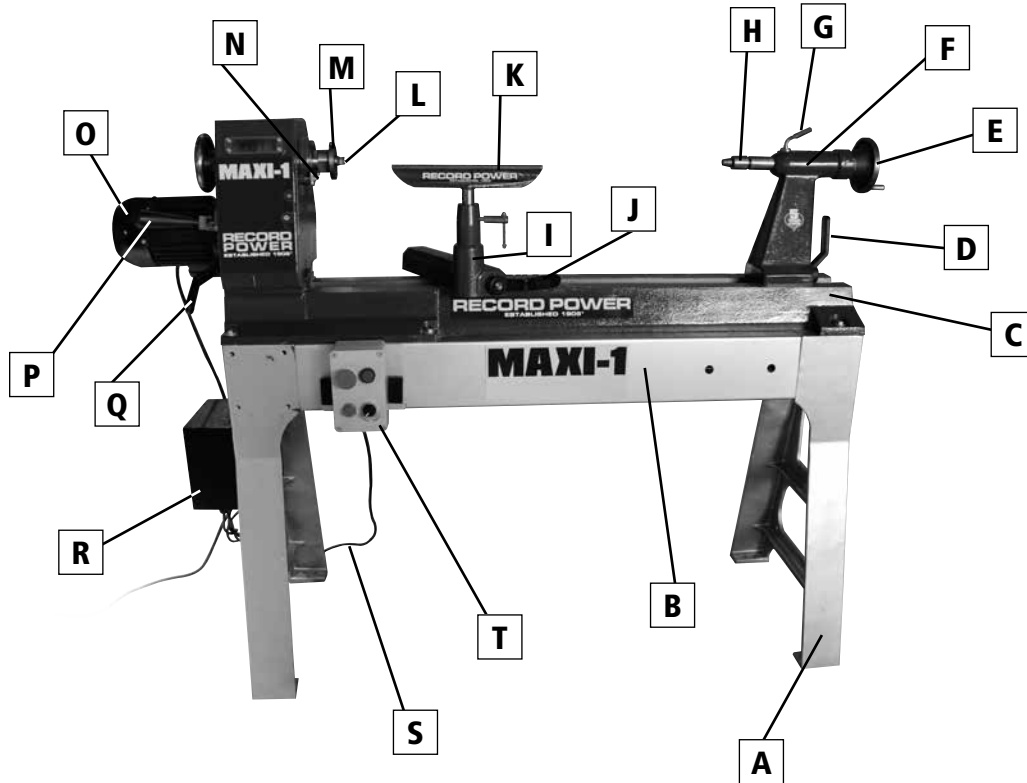
This Guarantee applies to all Products purchased from an Authorised Dealer of Record Power within the United Kingdom of Great Britain and Northern Ireland. Terms of Guarantee may vary in other countries – please check with the Authorised Distributor in your country (details of the Authorised Distributor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

# 2. Machine Description

## 2.1 Machine identification

There is an identification label fixed to the machine, containing the manufacturer's details, year of construction, serial number and specifications.

## 2.2 Getting to Know Your Machine



- |                                  |                             |
|----------------------------------|-----------------------------|
| A. Stand Leg                     | K. Tool rest                |
| B. Stand Body                    | L. Spur centre              |
| C. Lathe Bed                     | M. Face plate               |
| D. Tailstock locking lever       | N. Spindle lock             |
| E. Tailstock handwheel           | O. Motor                    |
| F. Tail stock                    | P. Belt tensioning lever    |
| G. Tailstock spindle locking arm | Q. Headstock locking lever  |
| H. Live centre                   | R. Transducer box           |
| I. Tool rest base                | S. Power cord               |
| J. Tool rest base locking lever  | T. Switch box/speed control |

## 2.3 Specifications

<b>Motor power P1 (input):</b>	1.6 kW
<b>Motor power P2 (output):</b>	1.1 kW
<b>Motor voltage:</b>	230 V
<b>Motor frequency:</b>	50 Hz
<b>Motor speed:</b>	1400 rpm
<b>Full load current:</b>	11 A
<b>Weight:</b>	210 kg
<b>Thread:</b>	1 1/4" x 8 TPI or M33 x 3.5
<b>Taper:</b>	2 Morse Taper
<b>Maximum bowl diameter:</b>	762 mm
<b>Maximum between centres:</b>	950 mm
<b>Maximum swing over bed:</b>	533 mm
<b>Spindle speeds:</b>	50 - 3850 rpm
<b>Noise Emission:</b>	Sound power level < 83 dB (A) Sound pressure level < 83 dB (A)
<b>Size:</b>	W1640 x D545 x H1270 mm



# 3. Assembly

**A** 1 x lathe bed including motor, transducer and control switch.

**B** 2 x stand body

**C** 2 x stand leg

**D** Wrench

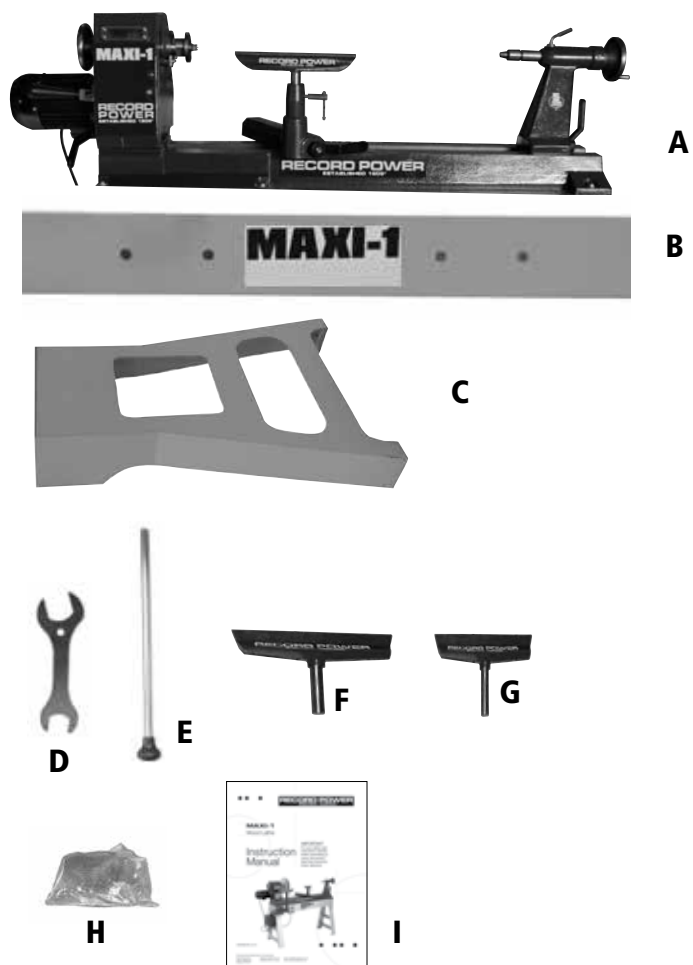
**E** Knockout bar

**F** 12" tool rest

**G** 6" tool rest

**H** Loose parts bag

**I** Instruction manual



# 3. Assembly



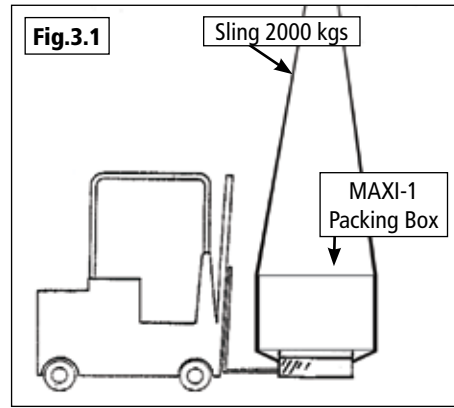
**Caution:** Many of the items are very heavy. We recommend that assistance is sought before trying to lift the larger components.



**Note:** The machine must not be plugged in and the power switch must be in the OFF position until assembly is complete.

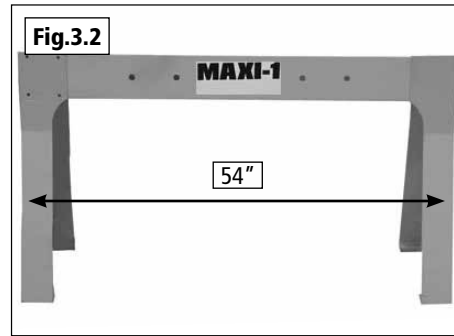
## 3.1 Lifting

The machine can be lifted using a fork-lift truck, placing the forks under the feet or by using a "SLING", as shown, with a lifting capability of 2000 Kg (Fig. 3.1).



## 3.2 Determine Lathe Location in Workshop

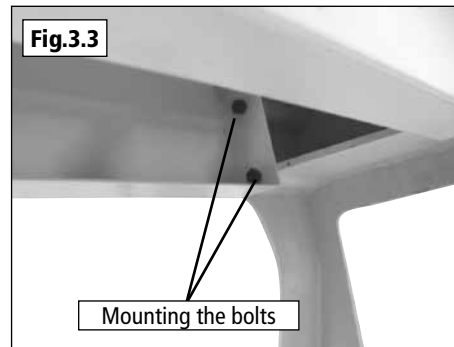
1. Find a location in the workshop that is level and has adequate lighting. Make sure that there is plenty of room between the lathe and other machines. Place the lathe in an area that will support its weight and is close to a power source.



## 3.3 Stand Assembly

1. Remove the two stand legs from the carton and position them approximately 1370 mm apart (Fig.3.2) measuring from the outside edges. Be sure that the ribbed braces are facing inward and that the leg with four additional holes (for the bowl turning rest) is at the left (headstock) end of the machine.

2. With assistance, lift stand body and carefully position the stand legs to align the bolt holes. Secure stand to legs by using eight M10 x 30 hex bolts and eight M10 flat washers (Fig.3.3).

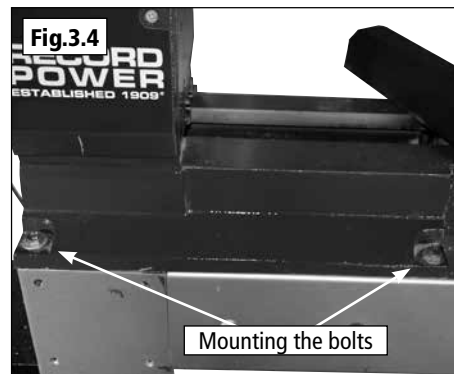


## 3.4 Bolting the Lathe to the Stand

1. Lift lathe body by the bed only, not by the head stock or tail stock assemblies.

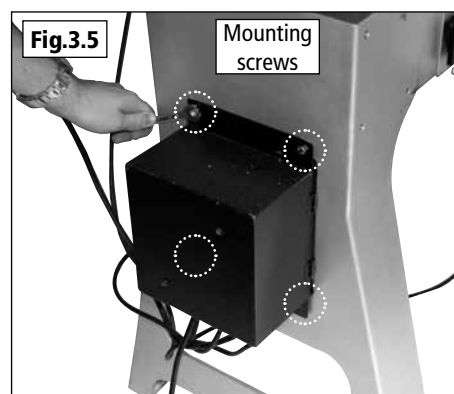
2. Carefully place the lathe body onto the stand and secure by using six M10 x 40 hex bolts, six M10 flat washers, and six M10 locking washers (Fig.3.4).

As the lathe bed is heavy you should seek assistance when positioning the lathe and ensure it is adequately supported until fully secured to the stand.



## 3.5 Mounting the Transducer box to the Stand leg

Place the transducer box to left stand leg and secure by using four Pan head screws (Fig.3.5).



# 3. Assembly

## 3.6 Mounting the Switch box to the Stand

1. Place the switch box insertion pegs (**Fig.3.6**) into the mounting holes on the main body of the stand (**Fig.3.7**).
2. Ensuring that the power cable is free to hang down from the switch box, push the two locking catches down to secure the switch box in place (**Fig.3.8**).

## 3.7 Different Positions of the Switch Box

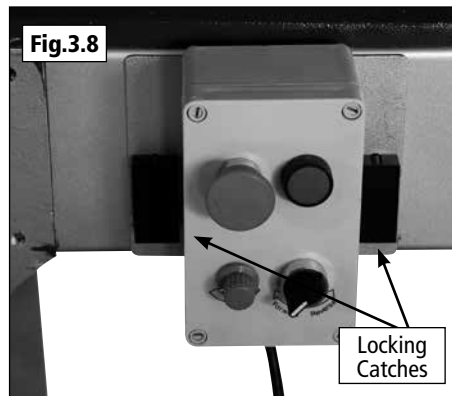
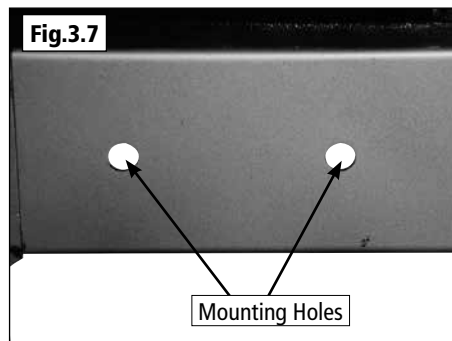
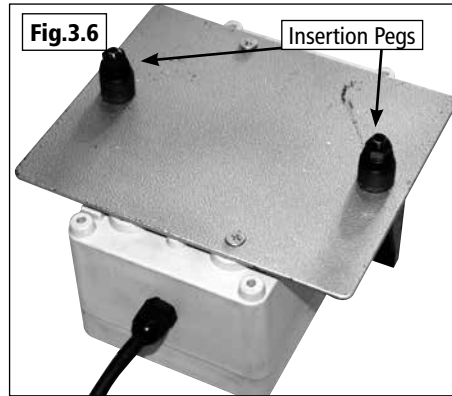
The Switch box can be attached in two different positions for safety and ease of use when turning.

### Position 1, Fig 3.9

Closest to the headstock is best used when working near the tailstock.

### Position 2, Fig 3.10

Closest to the tail stock is best used when working near the headstock.



# 4. Adjustment

## 4.1 Inserting Spur Centre into the Headstock

Insert the spur centre into the headstock - ensure that the shank is clean and free from dust or debris and place in position. Gently tap the front face of the spur centre with a mallet to ensure that it is correctly seated in the headstock spindle.

## 4.2 Removing Spur Centre from the Headstock

Insert the knockout bar into the headstock spindle from the handle end. Tap the end of the spur centre lightly using a mallet until it releases from the spindle (**Fig.4.1**).

## 4.3 Inserting the Live Centre into the Tailstock

Insert the live centre into the tailstock spindle - ensure that the shank is clean and free from dust or debris and place in position (**Fig.4.2**).

Once the workpiece is secured against the tailstock it can be locked in position using lever 'A' (**Fig.4.2**).

## 4.4 Removing Live Centre from the Tailstock

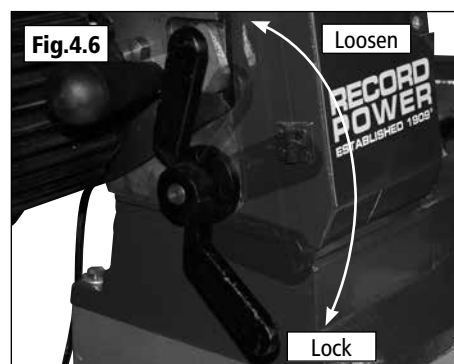
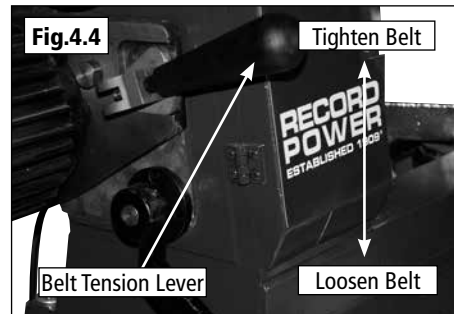
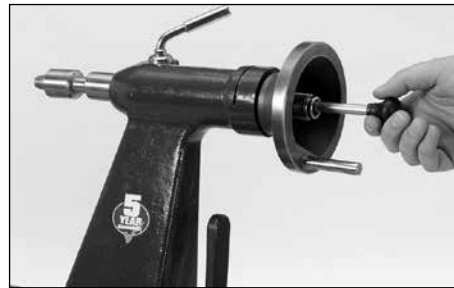
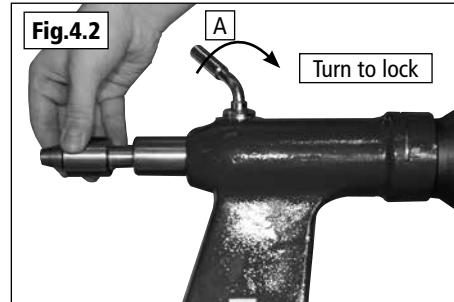
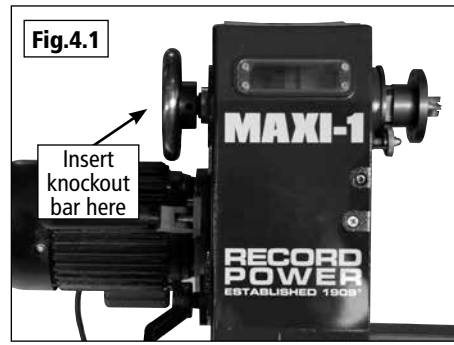
Insert the knockout bar into the tailstock spindle from the rear of the tailstock to push the live centre out. It may be necessary to gently tap the knockout bar with a mallet to loosen the live centre, **Fig 4.3**.

## 4.5 Tightening or Loosening Motor Belt - See Fig 4.4.

1. To release the belt tension lever, pull it towards the headstock. To tension the belt, raise the lever and to loosen the belt, lower the lever.
2. To lock at the desired tension move the lever in the direction of the arrow (**Fig.4.5**).

## 4.6 Tightening or Loosening the Headstock

Rotate the headstock locking handle counterclockwise to loosen the headstock (**Fig.4.6**). When you have finished headstock swivel adjustment, rotate the locking handle clockwise to lock the headstock.



# 4. Adjustment

## 4.6 Swivelling the headstock

Pull the position pin out with your right hand, at the same time loosen the locking handle by rotating it anti-clockwise and swivel the headstock with your left hand. Engage the position pin and then rotate the locking handle clockwise to lock the headstock (Fig.4.7).

## 4.7 Adjusting the Tool Rest



**Caution: Do not adjust tool rest or tool rest base while the lathe is turned on. Make sure lathe is turned off and that the work piece comes to a complete stop before making adjustments.**

1. The tool rest base (A-Fig.4.8) can be easily moved along the lathe bed. Loosen cam lever (B-Fig.4.8) counterclockwise, slide tool rest base to new position, and tighten cam lever clockwise.
2. To adjust the height of the tool rest, loosen locking arm (C-Fig.4.8), raise or lower tool rest, tighten locking arm.
3. To adjust clamping action of the tool rest base, remove base and adjust nut clockwise to increase the clamping force and counter clockwise to decrease the clamping force (Fig.4.9).

## 4.8 Adjusting the tailstock

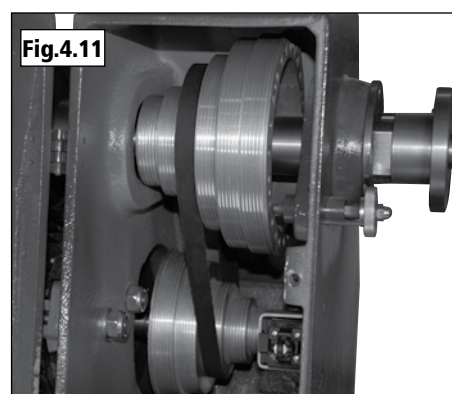
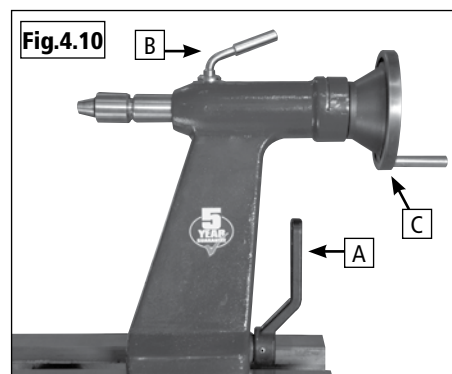
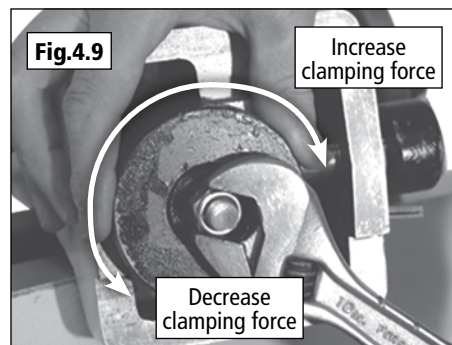
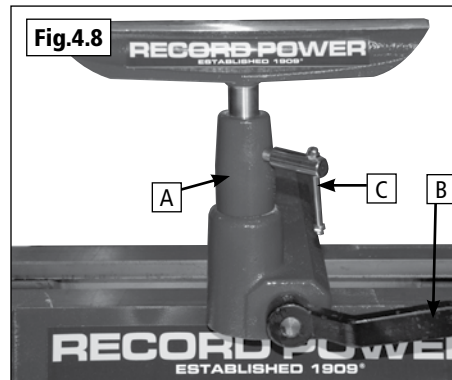
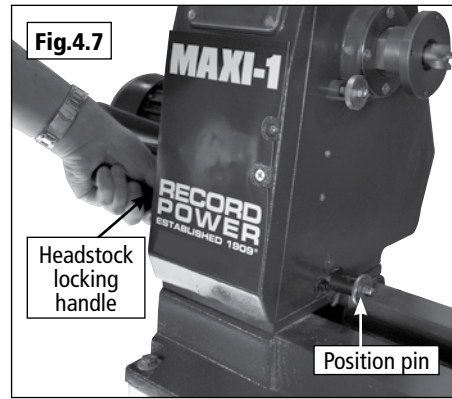
1. Loosen cam lever (A-Fig.4.10) to move the tailstock along the lathe bed to desired position. Tighten lever.
2. To adjust tailstock barrel in or out, loosen locking arm (B-4.10) and turn handwheel (C-Fig.4.10). When the tailstock barrel is in a desired position, tighten locking arm. (B-Fig.4.10).
3. To adjust clamping action of the tailstock, remove it from lathe bed and adjust nut clockwise to increase the clamping force and counter clockwise to decrease the clamping force (Fig.4.9).

## 4.9 Changing Pulley Torque Ratios

1. The lathe features six step motor and spindle pulleys (Fig.4.11) to provide six different spindle speed ranges. Open the access cover on the headstock to change spindle speeds.
2. With access cover open, loosen the belt tightening handle. Rotate the tightening handle to release tension on the belt. Check speed and belt position chart on the headstock to determine torque ratio required (Fig.4.13).
3. Move drive belt to desired pulley combination. Rotate the belt tightening handle counterclockwise and tighten the handle. Close access cover .



**Please note: The access cover for the headstock is fitted with a limit switch to protect the user in the event that the cover is opened whilst the lathe is running, the cover must be fully closed and secured before the lathe will start.**



# 4. Adjustment

## 4.10 Variable Speed Switch

1. In conjunction with the six speed pulley system, the lathe also features a variable speed control. To use with in a specific belt speed range, simply turn the lathe on by pressing the green button (A-Fig.4.12) and rotate the variable speed control knob (B-Fig.4.12) clockwise to increase the speed, and counter clockwise to decrease the speed. To turn the lathe off press the red stop button (C-Fig.4.12).  
If you wish to put the lathe into reverse simply turn the motor direction knob (D-Fig.1.12) to the right.

**Please note: The reverse switch must only be used when the machine is switched off.**

2. The variable speed dial will only increase speed to the highest speed shown depending on belt position. (Fig.4.13).

**Caution: Most turning can be safely and effectively achieved between 400 and 2000 rpm. The additional speeds achievable with this unit are for specialist turning such as high speeds for miniature work, pens and lace bobbins and slow speeds for thread cutting for example. These speeds are only to be used by experienced turners who have had adequate training and observe all recommended safety and operating procedures.**

### Pulley Speed Ranges (Fig.4.13)

By changing the belt on to each of the six different pulleys the speed can be varied from 50 rpm to 3850 rpm.

**Please note: When using the reversing function, be aware that any accessories fitted to the headstock spindle thread may become loose as the direction of rotation will be the same as the thread, only use accessories that feature an additional locking function (such as a grub screw etc) and do not rely on the spindle thread alone to secure them to the lathe.**

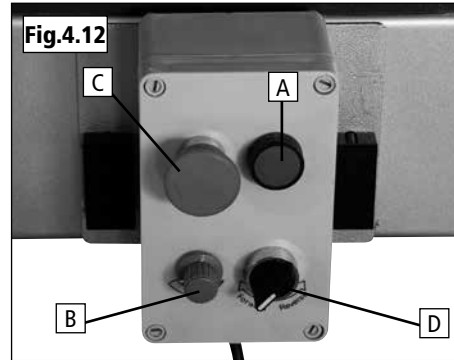


Fig.4.13

Speed Setting	Pulley Speeds (RPM)					
	50	70	120	200	350	460
0	50	70	120	200	350	460
1	83	116	198	325	590	799
2	116	162	276	450	830	1138
3	149	208	354	575	1070	1477
4	182	254	432	700	1310	1816
5	215	300	510	825	1550	2155
6	248	346	588	950	1790	2494
7	281	392	666	1075	2030	2833
8	314	438	744	1200	2270	3172
9	347	484	822	1325	2510	3511
10	380	530	900	1450	2750	3850

**! WARNING**

Disengage spindle lock before turning the machine on.

---

**SPINDLE SPEEDS**

POSITION	RPM
1	50 - 380
2	70 - 530
3	120 - 900
4	200 - 1450
5	350 - 2750
6	460 - 3850

# 4. Adjustment

## 4.11 Indexing Lock

1. The indexing lock (A-Fig.4.14) is positioned on the front of the headstock for ease of use. The headstock indexing feature has 24 equally spaced positions. The spring loaded locking pin assembly is engaged by turning the knob a quarter turn allowing it to drop into the desired position. To disengage, pull the lock knob out and turn a quarter turn in either direction until the locking locating pin enters the safety catch position in the knob.
2. The 24 position indexing feature (A-Fig.4.15) allows accurate pattern work on projects such as straight fluting, grooving, drilling, lay out and more.

**Please note: Do not use the indexing lock as a method of holding the spindle in order to fit or remove accessories. Always hold the spindle with the supplied spanner whilst fitting or removing accessories.**

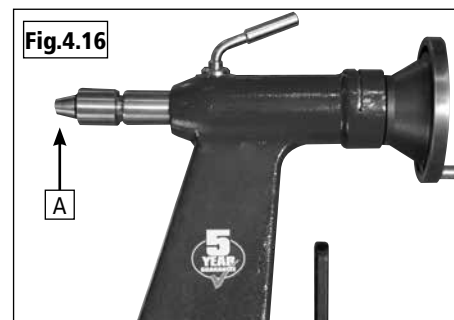
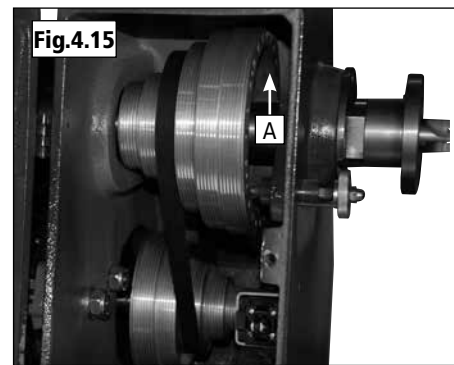
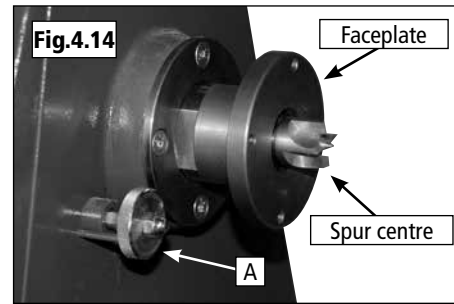
**Always ensure that the indexing lock is disengaged before attempting to start the machine.**

## 4.12 Spur Drive Centre - Headstock

1. The spur drive centre (Fig.4.14) is used in conjunction with the revolving centre in the tailstock to support cylindrical work such as chair and table legs.
2. When loading a project blank onto the spur drive centre, do not use a hammer or similar as damage to the headstock bearings may result. The pressure obtained via the tailstock hand wheel should be sufficient to provide adequate stability when turning softer woods. For harder woods, shallow diagonal saw cuts in the end section should be made plus a small hole in the centre. The spur centre can be directly knocked into the wood by using only a soft mallet. Never use a steel hammer as this will damage the taper shank.

## 4.13 Live Centre - Tailstock

1. The revolving live centre (A-Fig.4.16) is used for supporting spindle turning projects that can not be held suitably in a chuck.
2. It can also be used as a safety device to support face plate work for as long as possible, especially during roughing down stage.



## In the Event of a Blockage or if the Machine Stalls

If the lathe stalls due to a dig in, simply removing the turning tool from the work piece will normally allow the work piece to start turning again. The inverter drive unit of the lathe incorporates a thermal overload device. In case of a severe dig in, or if the work piece becomes trapped against a fixed part of the lathe, the thermal overload will usually cut power to the motor. If the thermal overload does not activate immediately switch the machine off by pressing the red button marked 'O' on the control box. 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. Turn the speed control knob to its lowest setting before attempting to re-start the machine. To re-start the machine, press the green button marked 'I' on the control box. Gradually increase the spindle speed by adjusting the speed control knob until the desired speed is reached.

## 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. Turn the speed control knob to its lowest setting before attempting to re-start the machine. Once the power is restored, the machine can be re-started by pressing the green button marked 'I' on the switch.

# 5. Intended Use of the Lathe & Basic Woodturning Instructions

## Intended Use of the Lathe

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

## Health & Safety

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



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



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

## Mounting Timber to a Faceplate or Chuck

Before mounting the workpiece to a faceplate or chuck (not supplied), it is advisable to shape the timber into as cylindrical a profile as possible, see **fig 8.1**. 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 8.2**. 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 8.3**.
3. Carefully place the four prong centre into the headstock spindle of the lathe, **fig 8.4**, 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 8.5**. Then use the tailstock locking handle to secure the position. The blank is now successfully mounted and ready to be turned.

## Positioning the Tool Rest

It is extremely important to ensure the tool rest is correctly positioned before turning on the lathe. Place the tool rest close to the timber, allowing enough room to manoeuvre the chisel with ease. Spin the timber by hand to ensure it does not 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

Fig.8.1

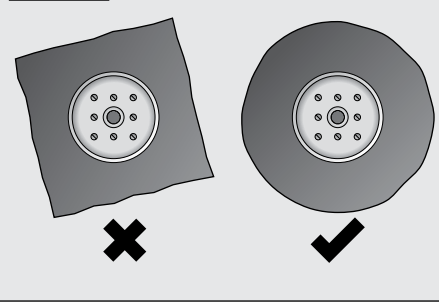


Fig.8.2

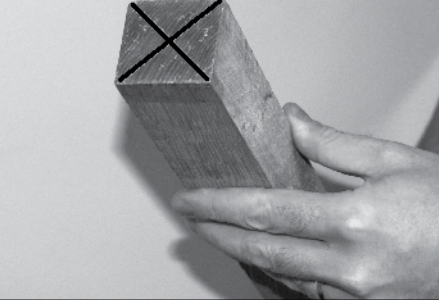


Fig.8.3



Fig.8.4

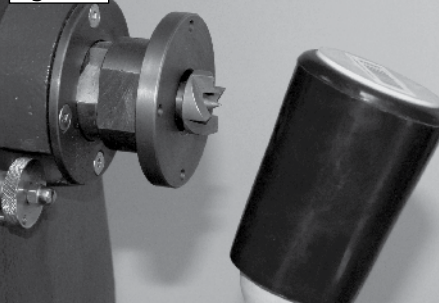
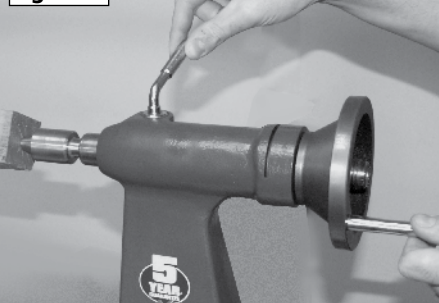


Fig.8.5





# 5. Intended Use of the Lathe & Basic Woodturning Instructions - cont.

being used. When using a roughing gouge, the cutting edge should come into contact with the centre of the workpiece, see **fig 8.6**. If using a skew chisel, the cutting edge should be applied approximately 3/8" (10 mm) above the centre height, see **fig 8.7**. A spindle gouge's cutting edge should come into contact with the workpiece approximately 3/8" (10 mm) below its centre, see **fig 8.8**.

## 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 8.9**. 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 8.9**. Never move the tool backwards, as this introduces the risk of splintering the wood and causing injury.

## Using the Spindle Gouge

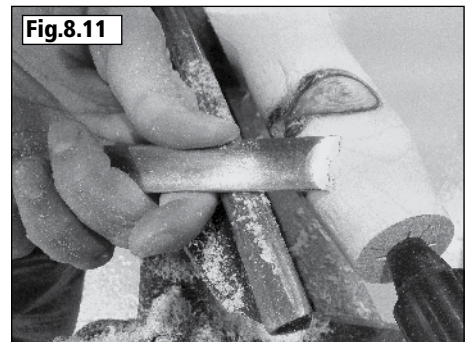
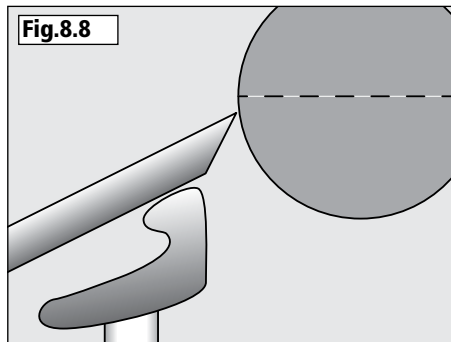
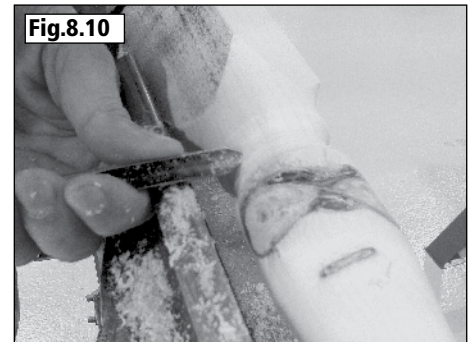
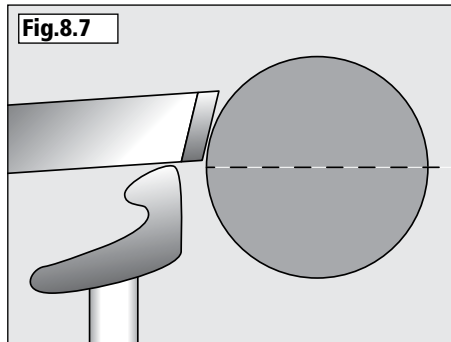
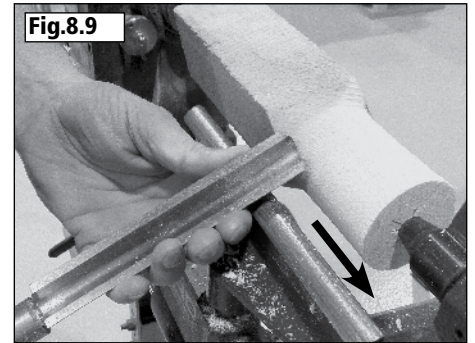
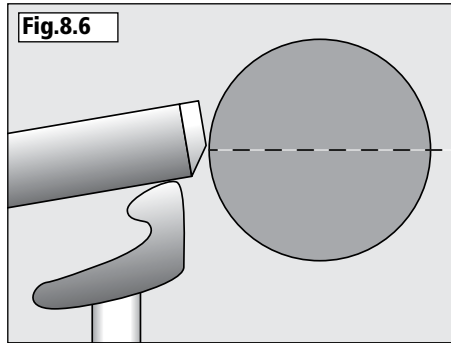
A spindle gouge is used to shape the final profile of a spindle and is capable of finer work than a roughing gouge. It is designed specifically for cutting coves or valleys. The blade should come into contact with the wood at just below the centre line. Resting it on the tool rest, apply the blade to the workpiece at an angle, see **fig 8.10**, 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 to dig in to the work piece or snatch the tools from your hands.

## 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 8.11**, again with the bevel rubbing the workpiece and raising the handle to take careful, controlled cuts.

## Further Operations

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



## Speeds of the Lathe

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

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

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

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

# 6. Troubleshooting

Symptom	Possible Causes	Solutions
Excessive vibration	Out of balance work.	Reduce spindle speed.
		Prepare wood to a true circle before loading into lathe.
		Point of holding may not be centralised. Holding method may not be sufficiently tight.
	Drive belt has been over tensioned or damaged.	Weight of motor should be sufficient prior to locking.
	Motor pulley not in correct alignment with headstock pulley.	Re-align motor pulley to headstock pulley square and parallel to each other.
	Headstock pulley loose.	Check pulley is correct on shaft. Tighten left hand locknut. Tighten both grub screws in pulley.
	Bolts holding motor to support plate are loose.	Tighten all bolts and check correct pulley alignment.
Stand or bench incorrectly standing on floor.	Refer to installation instructions.	
Face plate or chucks running out of true.	Dirt build up on rear of faceplate or chucks or around hexagon locking face.	Clean all mating faces regularly.
Belt not running true or becoming damaged on edges.	Headstock and motor pulley incorrectly lined up.	Re-align motor pulley to headstock pulley square and parallel to each other.
		Tighten all bolts and check correct pulley alignment.
<b>Tailstock</b>		
Tailstock handwheel becoming hard to turn.	Build up of dust and wood resin on quill or inside of handwheel thread.	Remove quill and handwheel from tailstock body. Wipe clean all areas including inside of tailstock body, lightly oil quill and grease handwheel. Re-assemble.
Tailstock not locking correctly into bed.	Incorrect clamp plate adjustment.	By adjusting the nut under the clamp plate, increase or decrease clamp pressure as required.
Tailstock not running smoothly on bed ways.	Dirty bed ways and underside of tailstock body.	Clean bed ways and underside of tailstock body with kerosine or similar.
	Incorrect adjustment on clamp plate.	Adjust clamp plate nut.
<b>Toolrest</b>		
Turning tools not running smoothly across toolrest.	Damaged surface on toolrest face caused by sharp edge tools.	Using a fine file, smooth surface on top of toolrest and polish with sandpaper. Remove sharp edges from the corners of turning tools.
<b>Cam-Lock Toolrest bracket</b>		
Toolrest brackets not running smoothly on bed ways.	Incorrect clamp plate adjustment.	By adjusting the nut under the clamp plate, increase or decrease clamp pressure as required.
	Dirty bed ways and underside of cam-lock bracket.	Clean bed ways and underside of toolrest bracket body with kerosine or similar.
Toolrest bracket not locking correctly onto bed.	Incorrect clamp plate adjustment (excessive pressure on cam lever should be avoided).	By adjusting the nut under the clamp plate, increase or decrease clamp pressure as required.
Toolrest bracket cam becoming tight to turn.	Dirty cam shaft and clamp tube.	Remove cam shaft from cam-lock bracket and clean all parts with kerosine or similar.
<b>Centres</b>		
Spur drive centre or tailstock centre	Small end of taper has been damage due to dropping or hitting.	File or polish away any damage. Check that inside of tapers have not been scored.
	Grease or oils inside tapers.	Wipe clean inside of tapers. Smear of oil between uses will help to reduce rusting.
	Insufficient pressure when loading.	Quick firm pushing by hand is required, or tap with a soft mallet.
Tailstock and Headstock centres not aligned correctly.	Bed incorrectly bolted to stand causing a twist.	Refer installation instructions.
	Stand incorrectly bolted or positioned on floor.	Refer installation instructions.

# 7. Dust Extraction

## The Importance Of Dust Extraction

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

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

## Record Power Extractors

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

### DX1000 High Filtration Dust Extractor

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

**0.5 micron filtration**

### RSDE1 High Filtration Dust Extractor

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

**0.5 micron filtration**

### RSDE2 High Filtration Dust Extractor

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

**0.5 micron filtration**

### RSDE/2A High Filtration Dust Extractor with Auto Switching

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

**0.5 micron filtration**

### DX4000 High Filtration Dust Extractor

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

### DX5000 High Filtration Dust Extractor

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

### CX2000 Compact Chip Extractor

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

### CX2600 Chip Collector

Large capacity chip collector, with a powerful 0.37 kW induction motor. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

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

### CX3000 Chip Collector

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

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

### Air Cleaners

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

	DX1000	RSDE1	RSDE2	RSDE/2A	DX4000	DX5000	CX2000	CX2600	CX3000
<b>Bandsaws</b> <b>Circular saws</b> <b>Sanders</b> Intermittent usage	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended			
<b>Bandsaws</b> <b>Circular saws</b> <b>Sanders</b> Heavy usage					✓ Recommended	✓ Recommended			
<b>Planer Thicknessers</b> <b>Spindle Moulders</b> <b>Universals</b> Intermittent usage	✓ Recommended	✓ Recommended			✓ Can be used	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended
<b>Planer Thicknessers</b> <b>Spindle Moulders</b> <b>Universals</b> Heavy usage					✓ Can be used	✓ Recommended		✓ Recommended	✓ Recommended
<b>Dust Extraction System</b> Intermittent usage					✓ Can be used	✓ Recommended			

# 8. Electrical Connection & Wiring Diagram

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

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

Machines supplied for use in Australia & 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. 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:

## 400 V (3 phase)

Brown: Live (L1)  
 Black: Live (L2)  
 Grey: Live (L3)  
 Blue: Neutral (N)  
 Green and Yellow: Earth (E)

The wire coloured brown must always be connected to the terminal marked 'L1'.

The wire coloured black must always be fitted to the terminal marked 'L2'.

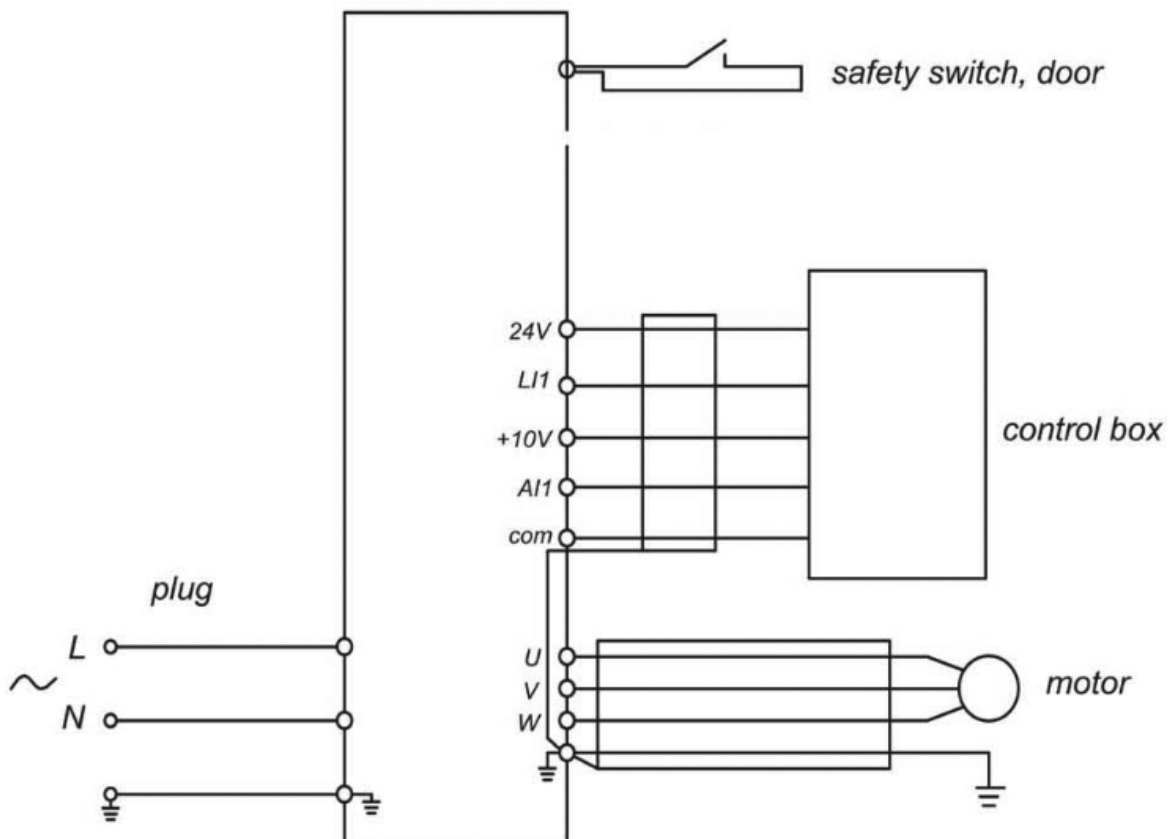
The wire coloured grey must always be connected to the terminal marked 'L3'.

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

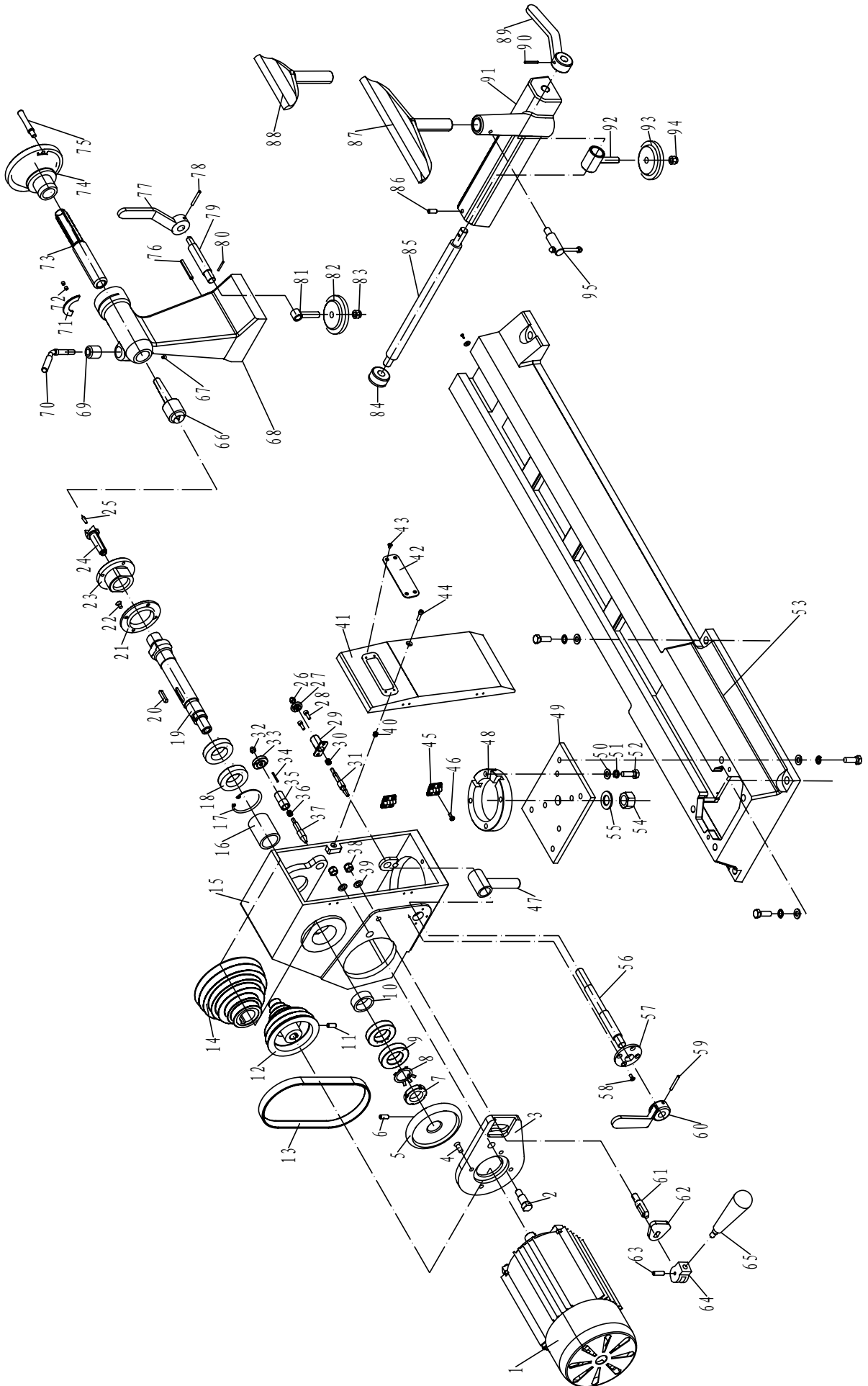
The wire coloured green and yellow must always be connected to the terminal marked 'E' or with the earth symbol

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

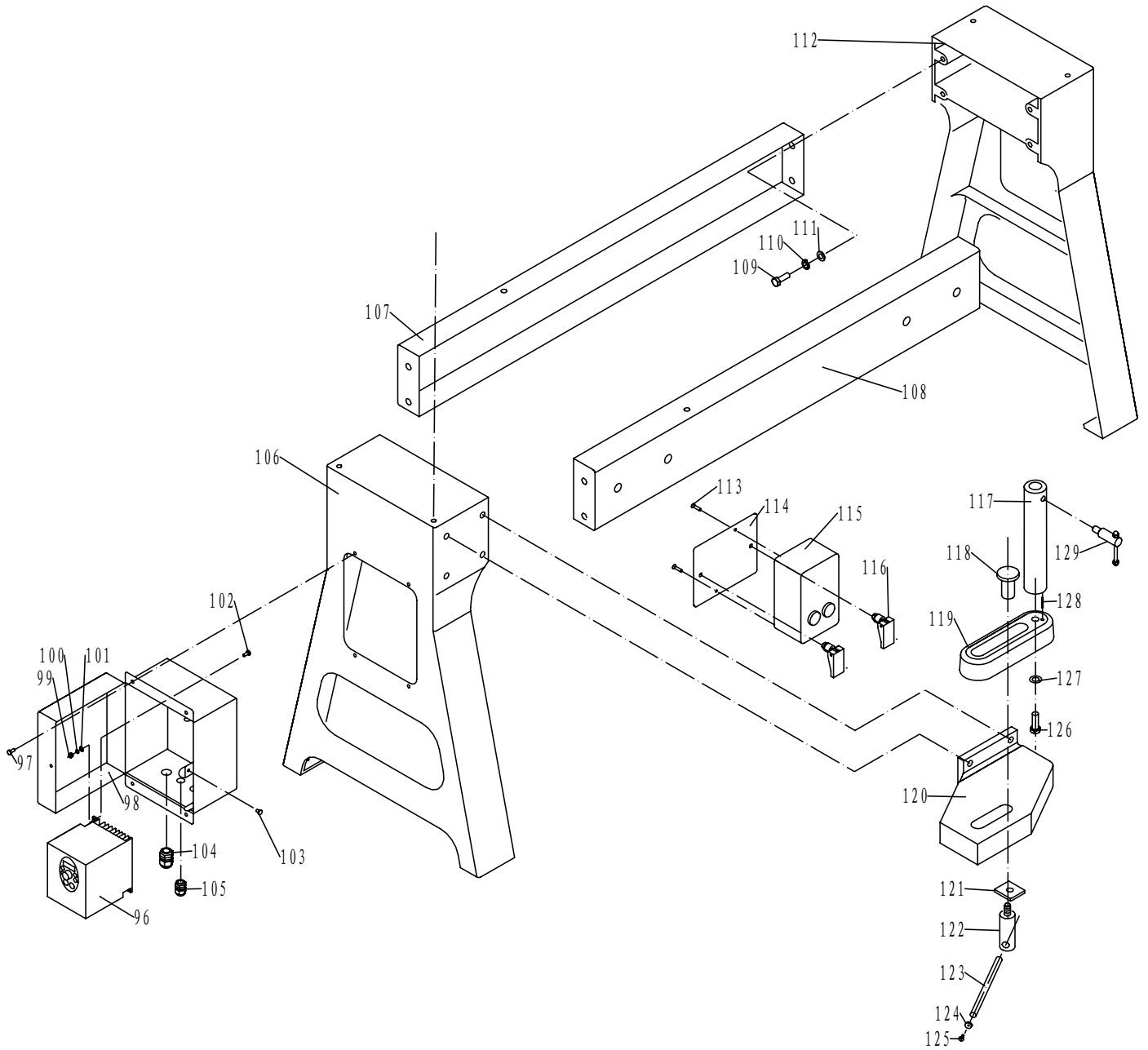
*the frequency converter*



# 9. Diagrams & Components



# 9. Diagrams & Components



# 9. Diagrams & Components

	<b>Part No.</b>	<b>Description</b>	<b>Key No.</b>	<b>Part No.</b>	<b>Description</b>
1	F8040504	Motor	70	JL91020004	Tailstock spindle locking arm
2	JL94010115	Carriage bolt	71	JL91020005	Semicircular plate
3	JL94010301A	Mounting plate	72	M6X8GB80B	Set screw M6X8
4	M8X30GB70D3Z	Set screw M8X30	73	JL91020002	Tailstock spindle
5	JL94010105A	Handwheel	74	JL91022002	Tailstock handwheel
6	M8X16GB79B	Set screw M8X16	75	JL91022001	Handle
7	M30GB812Z	Hex nut M30	76	PIN5X40GB879D1B	Pin 5X40
8	WSH30GB858B	Retaining washer 30	77	JL91020007	Cam lever
9	BRG6006-2RSV2	Bearing 6006	78	PIN5X40GB879D1B	Pin 5X40
10	JL94010108A	Spacer	79	JL91020006	Cam spindle
11	M8X12GB77B	Set screw M8X12	80	PIN3X30GB879D1B	Pin 3X30
12	JL94010201A	Motor pulley	81	JL91023000	Cam spindle tube
13	JL94010109	Poly V belt	82	JL91020008	Clamp disc
14	JL94010103A	Spindle pulley	83	M12GB889B	Lock nut M12
15	JL94010101A	Headstock	84	JL91030005	Tube
16	JL94010104A	Spacer	85	JL91030006	Cam spindle
17	CLP62GB893D1B	Retaining ring 62	86	M8X12GB80B	Set screw M8X12
18	BRG6007VVC	Bearing 6007	87	JL91030003	Tool rest 300
19	JL94010102A	Spindle M30X3.5	88	JL91030004	Tool rest 150
20	PLN8X7X40GB1096	Key 8X7X40	89	JL91020007	Cam lever
21	JL91010013A	Bearing plate	90	PIN5X40GB879D1B	Pin 5X40
22	M6X12GB70D3Z	Set screw M6X12	91	JL94030001	Tool rest base
23	JL91010010A	Face plate	92	JL91032000	Cam spindle
24	JL91011001	Spur centre	93	JL91020008	Clamp disc
25	JL91011002	Centre point	94	M12GB889B	Lock nut M12
26	M6GB923Z	Cap nut M6	95	JL91031000	Locking arm
27	JL94010403	Pin plate	96	ATV31HU11M2A	Transducer
28	M5X12GB70B	Hex socket head screw	97	M6X10GB818B	Pan head screw M6X10
29	JL94010402	Pin tube	98	JL94081000	Transducer box
30	JL94010404	Spring	99	M5GB6170B	Hex nut M5
31	1-JL94010401	Pin	100	WSH5GB93B	Spring washer 5
32	M6GB923Z	Cap nut M6	101	WSH5GB97D1B	Flat washer 5
33	JL91012004	Indexing pin nut	102	M5X16GB818B	Pan head screw M5X16
34	PIN3X30GB879D1Z	Pin 3x30	103	M5X8GB818B	Pan head screw M5X8
35	JL91012002	Indexing pin body	104	JL91046100	Strain relief M20
36	JL91012003	Spring	105	JL91046300	Strain relief M16
37	JL91012001	Indexing pin	106	JL94040001A	Stand leg
38	M12GB889B	Lock nut M12	107	JL94040003	Rear stand body
39	WSH12GB97D1B	Flat washer 12	108	JL94040004	Front stand body
40	M5GB889Z	Lock nut M5	109	M10X25GB5783Z	Hex bolt M10X25
41	JL94010008B	Access cover	110	WSH10GB93Z	Spring washer 10
42	JL91010023	Plastic window	111	WSH10GB97D1Z	Flat washer 10
43	M4X10GB819	Screw M4X10	112	JL94040001	Stand leg
44	M5X25GB70Z	Hex socket head screw	113	M5X20GB819Z	Set screw M5X20
45	JL94010500	Hinge	114	JL91042001	Mounting plate
46	M4X12GB818B	Pan head screw M4X12	115	JL91042000	Switch
47	JL94010112	Spindle tube	116	JL91042100	Locking bar
48	JL94010003A	Position disc			
49	JL94010005A	Mounting plate			
50	WSH10GB97D1Z	Flat washer 10			
51	WSH10GB93Z	Spring washer 10			
52	M10X30GB5783Z	Hex bolt M10X30			
53	JL91010002A	Lathe bed			
54	M20GB889D2Z	Lock nut M20	117	JL91100004	Tool rest support
55	WSH20GB95Z	Washer 20	118	JL91100003	Locking shaft
56	JL94010111	Cam spindle	119	JL91100002	Support bracket
57	JL94010113	Mounting plate	120	JL94070001	Base casting
58	M5X12GB70D3B	Set screw M5X12	121	JL91100008	Square washer
59	PIN5X40GB879D1B	Pin 5X40	122	JL91100005	Locking threaded shaft
60	JL91020007	Locking lever	123	JL91100006	Locking handle shaft
61	JL94010117	Spindle	124	JL91100007	Cap plate
62	JL94010302A	Adjusting cam	125	M4X10GB819Z	Set screw M4X10
63	PIN6x24GB879B	Pin 6X24	126	M12X30GB5783Z	Hex bolt M12X30
64	JL94010116	Position cam	127	WSH12GB97D1Z	Flat washer 12
65	JL82050007A-0015	Handle	128	PIN6X35GB879D2B	Pin 6X35
66	JL91021000	Live centre	129	JL91031000	Locking arm
67	JL91020009	Set screw			
68	JL94020001	Tailstock			
69	JL91020003	Locking tube			

Available for optional Rear Turning Attachment  
(Part No.117 through Part No.129)

# EU Declaration of Conformity

**Cert No: EU / MAXI-1 / 1**

**RECORD POWER LIMITED,**

Centenary House, 11 Midland Way, Barlborough Links,  
Chesterfield, Derbyshire S43 4XA

declares that the machinery described:-

1. Type: **Heavy Duty Variable Speed Swivel Head Lathe**

2. Model No: **MAXI-1**

3. Serial No .....

Conforms with the following directives:-

MACHINERY DIRECTIVE                    2006/42/EC  
(repealing / replacing Directives)

LOW VOLTAGE DIRECTIVE                2006/95/EC

ELECTROMAGNETIC  
COMPATIBILITY DIRECTIVE            2004/108/EC  
EN55014-1:2006  
EN55014-2:1997/+A1:2001/+A2:2008  
EN61000-3-2:2006  
EN61000-3-3:2008

and conforms to the machinery example for which the  
EC Type-Examination Certificate No. **SH09081132-001, SH09081132-002, SH09081133-001**  
at: Intertek Testing Services Shanghai, Building No 86, 1198 Qinzhou Rd (North), Shanghai 200233

and complies with the relevant essential health and safety requirements.



Signed.....Dated: **01/08/2014**

**Andrew Greensted**  
Managing Director











Over  
**100**  
 years

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**United Kingdom**

**Record Power Ltd**  
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 Chesterfield  
 Derbyshire S43 4XA  
 Tel: 01246 571 020  
 Fax: 01246 571 030  
[www.recordpower.co.uk](http://www.recordpower.co.uk)

Made in China

**Eire**

**Record Power Ltd**  
 Centenary House,  
 11 Midland Way  
 Barlborough Links,  
 Chesterfield  
 Derbyshire S43 4XA  
 Tel: 01246 571 020  
 Fax: 01246 571 030  
[www.recordpower.co.uk](http://www.recordpower.co.uk)

**Australia**

**Tools 4 Industry**  
 Po Box 3844  
 Parramatta 2124  
 Tel: 1300 124 422  
 Fax: 1800 262 725  
[www.recordpower.com.au](http://www.recordpower.com.au)

**New Zealand**

**Tools 4 Industry**  
 Po Box 276079  
 Manukau City 2241  
 Tel: 0800 142 326  
 Fax: 09 2717 237  
[www.recordpower.co.nz](http://www.recordpower.co.nz)

**France**

**Robland France Polybois**  
 3 Avenue des Violettes  
 Z.A. des Petits Carreaux  
 94384 Bonneuil/Marne Cedex  
 Tel : 0033 1 43777562  
 Fax : 0033 1 43995519  
 email: [polybois@robland.fr](mailto:polybois@robland.fr)