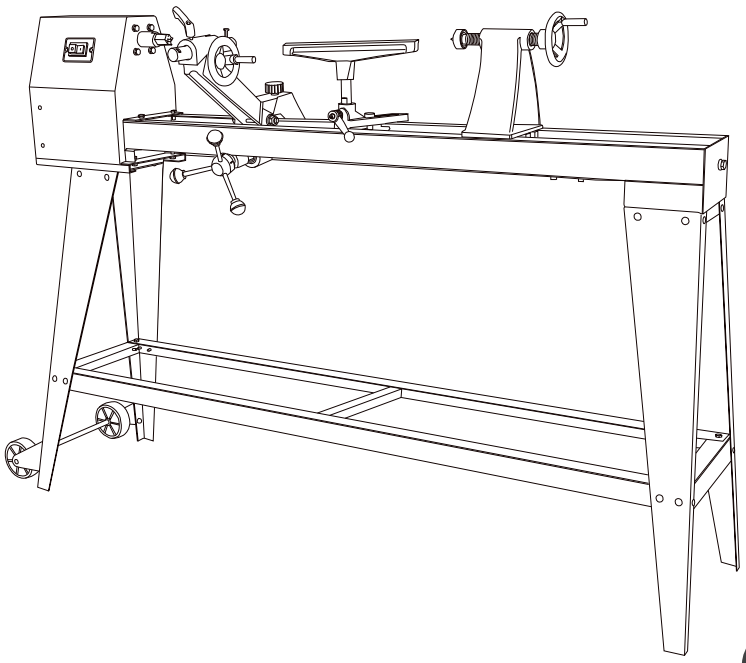
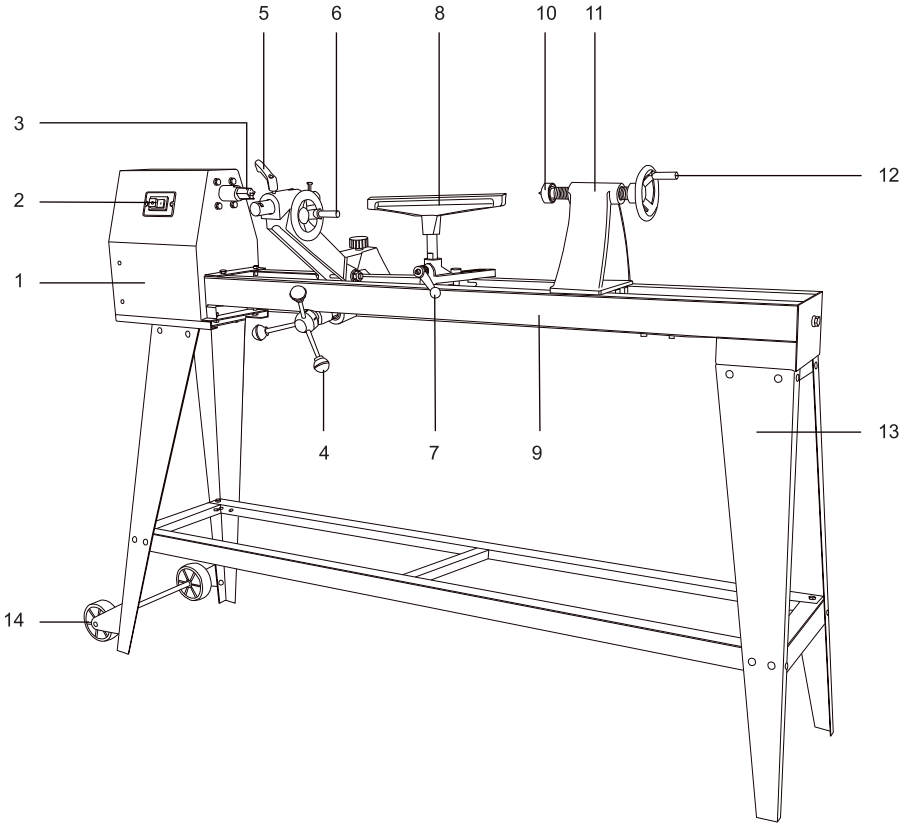
RYOBI®

WL-2000

GB OWNER'S OPERATING MANUAL

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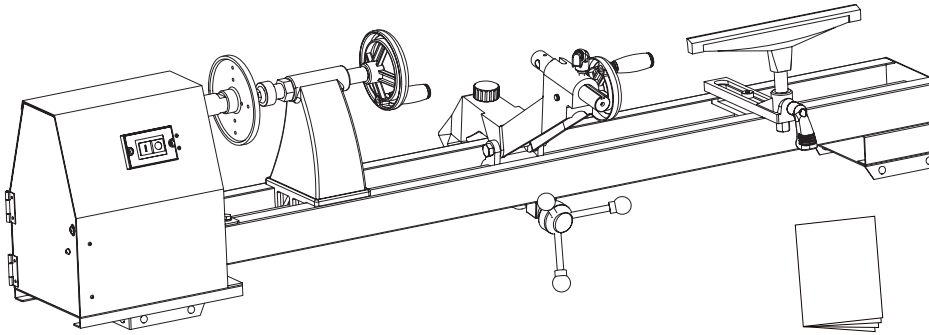
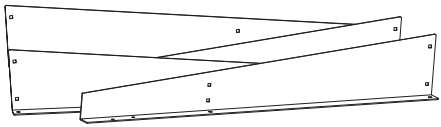


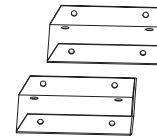
The Lathe Bed Assembly

Instruction manual

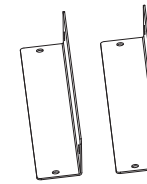
2 Leg support (long)



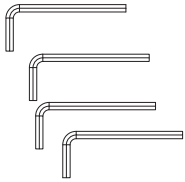
2 front Legs & 2 back legs



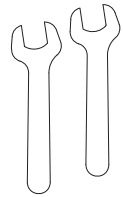
Leg plate



2 Leg support (short)



Hex key



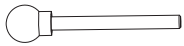
Wrench

Face plate

Nut

Washer

Lock washer

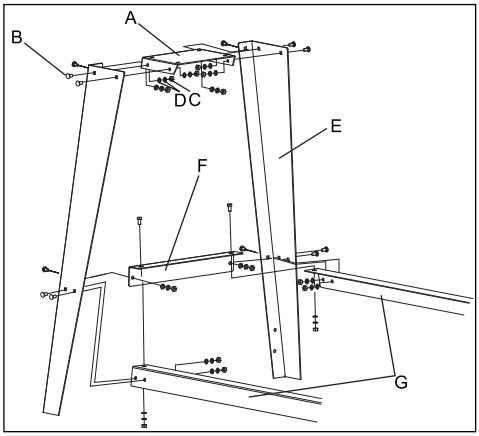


Handle

Tailstock cup center

Headstock spur center

Hex bolt



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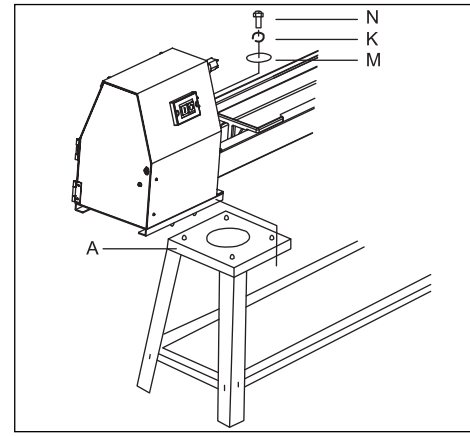

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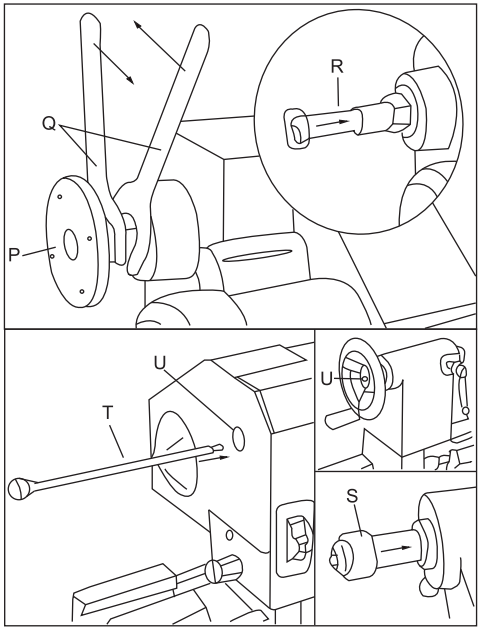

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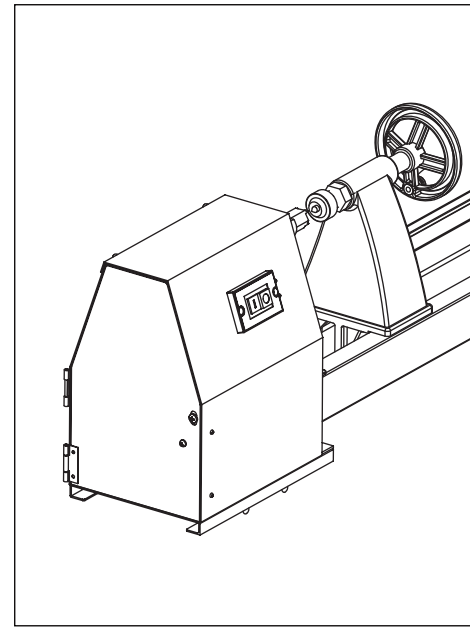

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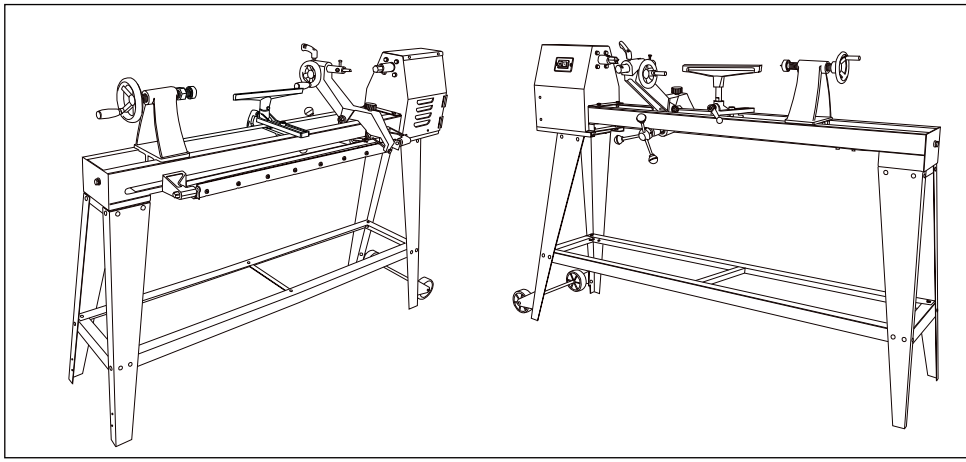

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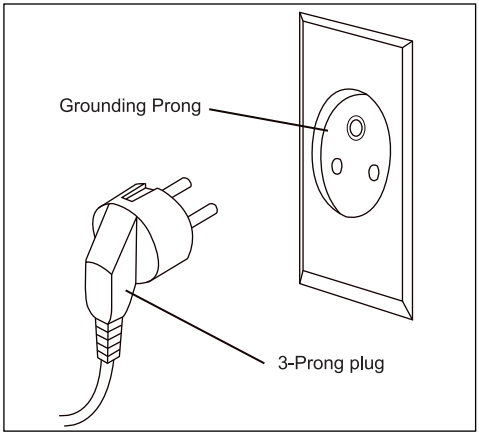
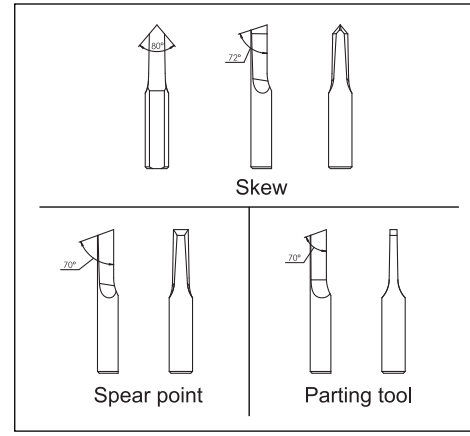
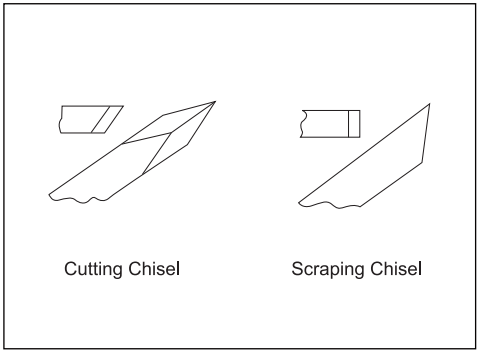

Grounding Prong
3-Prong plug

7


80°
72°
Skew
70°
Spear point
70°
Parting tool

8


Cutting Chisel
Scraping Chisel

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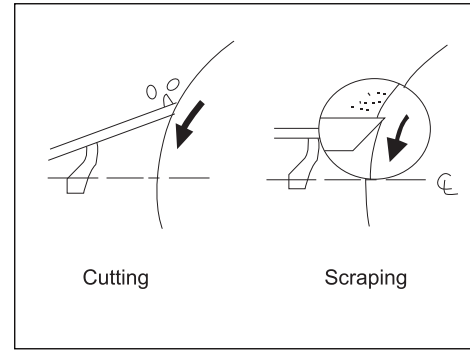
Cutting
Scraping

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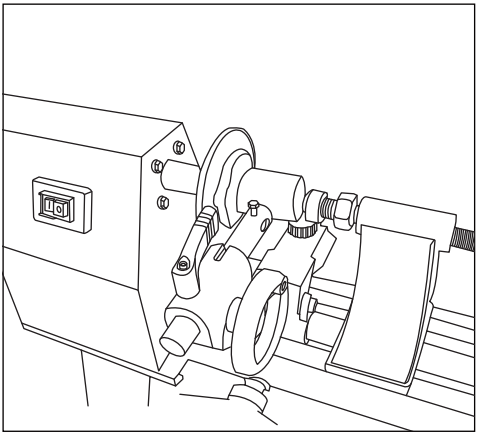

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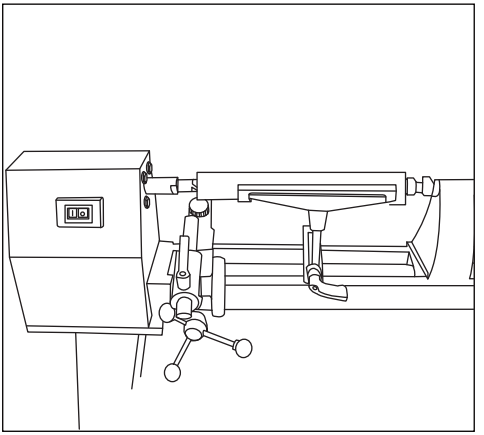

12

THANK YOU FOR BUYING A RYOBI PRODUCT.

To ensure your safety and satisfaction, carefully read through this OWNER'S MANUAL before using the product.

General Safety Rules

WARNING! Read all instructions Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

1) Work area

a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.

b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2) Electrical safety

a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock

b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

3) Personal safety

a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.

d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.

4) Power tool use and care

a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.

b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

5) Service

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

INSTRUCTIONS FOR SAFE HANDLING

1. Make sure that the tool is only connected to the voltage marked on the name plate.
2. Never use the tool if its cover or any bolts are missing. If the cover or bolts have been removed, replace them prior to use. Maintain all parts in good working order.
3. Always secure tools when working in elevated positions.
4. Never touch the blade or other moving parts during use.
5. Never start a tool when its rotating component is in contact with the workpiece.
6. Never lay a tool down before its moving parts have come to a complete stop.
7. **ACCESSORIES:** The use of accessories or attachments other than those recommended in these instructions might present a hazard.
8. REPLACEMENT PARTS: When servicing use only identical replacement parts.

SPECIFIC SAFETY RULES FOR THE WOOD LATHE

1. For your own safety, read the entire instruction manual before operating the lathe.
2. Always wear eye protection.
3. Do not wear gloves, necktie or loose clothing.
4. Tighten all lock levers before operating.
5. Do not mount a split workpiece.
6. Use the lowest speed when starting a new workpiece.
7. Read the warning label attached to the wood lathe.
8. When turning a workpiece, always rough the wood to round from at slow speed. If the lathe is run so fast that it vibrates, there is a risk that the workpiece will be thrown or the tool jerked from your hand.
9. Always rotate the workpiece by hand before turning on the motor. If the workpiece strikes the tool rest, It could split and be thrown out of the lathe.
10. Do not allow the turning tools to bite into the wood. The wood could split or be thrown from the lathe.
11. Always position the tool rest above the centerline of the lathe when shaping a piece of stock.
12. Do not operate the lathe if it is rotating in the wrong direction. The workpiece must always be rotating toward you.
13. Before attaching a workpiece to the faceplate, always rough it out to make it as round as possible. This minimises the vibrations while the piece is turned. Always fasten the workpiece securely to the faceplate. Failure to do could result in the workpiece being thrown from the lathe.
14. Position your hands so that they will not slip onto the workpiece.
15. Remove all loose knots in the stock before mounting it between the centres or on the faceplate.
16. Leave the work area only after the lathe's motor has come to a full stop.
17. Hand your turning tools on the wall beyond the Tailstock end of the lathe. Do not lay them on the bench so that you must reach over the revolving workpiece to the selected item.
18. Keep a firm hold and remain in control of the cutting tool at all times. Take special precautions when shaping a selection of stock in which knots or voids are found.
19. Complete the hand sanding of all work pieces BEFORE you remove them from the lathe.

DESCRIPTION

1. Motor
2. ON/OFF switch
3. Drive centre
4. Handle
5. Locking handle
6. Crank handle
7. Tool rest lock handle
8. Tool rest
9. Bed rails
10. Tail stock cup centre
11. Tail stock assembly
12. Crank handle
13. Leg support
14. Wheels

SPECIFICATION

Voltage	230V, 50Hz
Power input	550W
No load speed	810/1180/1700/2480min^{-1}
Max. swing diameter	350mm
Centre height	175mm
Distance between centre	1,000mm
Weight	63kg

UNPACKING (Fig. 1)

CAUTION! The wood lathe is very heavy and must be lifted with the help of 2 people or more. The assembly process requires 2 people or more to safely assembly the lathe to the leg set.

- Carefully remove the leg set and wood lathe from the carton.
- Separate the parts for the leg set from the parts of the lathe.
- Lay out all parts and check them against the parts listed below. Examine all parts carefully.

Warning! If any parts is missing or damaged, DO NOT plug the wood lathe in until you have replaced the missing or damaged part. For your safety, complete the assembly of the lathe before plugging it into the power supply.

ASSEMBLY

ERECTING THE LEG SET (Fig. 2)

1. Attach one front and one back leg "E" to the outside edge of the top plate "A" using carriage bolts "B", washer "D", and nuts "C".

2. Position the top plate so that it fits inside the legs.
3. Repeat step 1 for the opposite side.
4. Attach long supports “G” to legs using carriage bolts, washers and nuts.
5. Attach short supports “F” to legs using carriage bolts, washers and nuts.
6. Place the stand on a level surface and tighten all nuts securely using a 14mm wrench or adjustable wrench.

SETTING THE LATHE ON THE LEG SET (Fig. 3)

1. Position the headstock “H” assembly over the top plate and align the holes in the bed J with the holes in the top plate “A”. Set the headstock down carefully.
2. Align tailstock assembly end of the lathe over the top plate mounting holes and set it down carefully.
3. Insert the hex bolt “N” into the mounting holes in each bed and into the top plate.
4. Thread washer “M” and nut K onto bolt “N” and tighten securely.

SPURS (Fig. 4)

1. Remove the faceplate “P” from the headstock spindle using the two wrenches provided “Q” to separate the faceplate from the spindle nut.
2. Insert the headstock spur “R” in the spindle hole.
3. Insert the tailstock center “S” in the tailstock hole.
4. To remove either the headstock spur or the tailstock, insert the push-out rod “T” into the hole “U” at the opposite end of the headstock or tailstock. Remove and store the rod in a safe location after use.

FACE PLATE (Fig. 5)

1. Remove the headstock spur from the spindle.
2. Thread the faceplate to the spindle.
3. Mount the workpiece to the faceplate with the flat head brass wood screws. Make sure the length of the screw does not interfere with the cutting tools.

INSTALLATION

LOCATION OF WOOD LATHE

The lathe should be positioned so that neither the operator nor a casual observer is forced to stand in line with the spinning chuck.

COPY SYSTEM (Fig. 6)

- Assembly right & left brackets to back side of main frame using block and Hex screw.
- Assembly sample holding centers as shown in assembly drawing.
- Place part to be copied in centred position between centers.
- To use pattern (template) assemble pattern to hinged pattern holder. Swing pattern holder into position, Between centers and tighten in place.

MOUNTING LATHE TO BENCH

- Position the lathe assembly on top of a suitable stand or bench. The headstock end should be closed enough to a side edge so that outboard operations can be performed without difficulty.
- Verify that the bed is resting flat on the bench top. Mark the mounting hole locations using the holes in the bed as a guide. Move the lathe and drill four 3/8″holes through the bench top. Place the lathe back in position and feed four 5/16×2″carriage bolts through the holes in the bed. Secure from underneath with flat washers, lock washers, and hex nuts (no supplied).

STABILITY OF WOOD LATHE

If there is any tendency for the lathe to tip over or move during certain cutting operations, such as cutting extremely heavy pieces or long, out-of-round objects, the lathe should be bolted down.

INSTALLATION OF CENTERS

The spur center and the bearing center have Morse #2 to match the spindle and tail stock bores. To install the centers, slide them into the bores with a firm, swift movement. They will be further secured when a workpiece is squeezed between the centers.

STRUCTURE AND FUNCTIONS

ELECTRICAL CONNECTIONS

WARNING! Make sure unit is turned off and disconnected from power source before inspecting any wiring.

The wood lathe is assembled with motor and wiring installed as an integral part of the headstock assembly.

POWER SOURCE

WARNING! Do not connect wood lathe to the power source until all assembly steps have been completed. The motor is designed for operation on the voltage and frequency specified. Normal loads will be handled safely on voltages not more than 10% above or below specified voltage. Running until on voltages which are not within range may cause overheating and motor burnout. Heavy loads require that voltage at motor terminals be no less than the voltage specified on nameplate.

GROUNDING INSTRUCTIONS (Fig. 7)

WARNING! Improper connection of equipment grounding conductor can result in the risk of electrical shock. Equipment should be grounded while in use to protect operator from electrical shock.

- Check with a qualified electrician if you do not understand grounding instructions or if you are in doubt as to whether the tool is properly grounded.
- This tool is equipped with an approved cord rated at 230v and a 3-prong grounding type plug for you protection against shock hazards.
- Grounding plug should be plugged directly into a properly installed and grounded 3-prong grounding-type receptacle, as shown.
- Do not remove or alter grounding prong in any manner. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical shock.

OVERLOAD PROTECTION

If the motor protection responds, this always indicates that the motor is overloaded. The cause must be located and the fault eliminated.

If the motor is overloaded or in the event of power failure, the motor switches off automatically. The machine can not be switched on again until the motor is cooled down or the power supply has been restored.

USER RESPONSIBILITY

This machine will perform in conformity with the description contained in this manual when installed, operated, maintained and repaired in accordance with the instructions provided.

This machine must be checked periodically. Defective equipment (including power cable) should not be used. Parts that are broken, missing, plainly worn, distorted or contaminated, should be replaced immediately. Should such repair or replacement become necessary, it is recommended that such repairs be carried out by qualified persons.

This machine or any of its parts should not be altered or changed or changed from standard specifications. The user of this machine shall have the sole responsibility for any malfunction which results from improper use or unauthorized modification from standard specification, Faulty maintenance, damage or improper repair.

OPERATION

WARNING! Always observe the following safety precautions:

- Whenever adjusting or replacing any parts on the tool, turn switch OFF and remove the plug from power source.
- Recheck all locking handles. They must be tightened securely.
- Make sure all fasteners are tight and have not vibrated loose.
- Make sure all moving parts are free and clear of any interference.
- With power disconnected, test operation by hand for clearance and adjust necessary.
- Always wear eye protection or face shield.
- After turning switch on, always allow the spindle to come up to full speed before turning.
- Be sure motor runs counterclockwise when viewing spindle from the right end (inboard side of headstock).
- Keep hands clear of spindle, center, faceplate and other moving parts of machine.
- For optimum performance, do not stall motor or reduce speed. Do not force the tool into the work.

CHANGE SPEEDS

To vary spindle speed, rotate speed control knob to the desired setting.

CAUTION! Change speeds only while motor is running.

USING WOODWORKING CHISELS (Fig. 8)

Selection of chisels

Better chisels have handles approximately 10″long to provide plenty of grip and leverage. Sharp tools are essential for clean, easy work. Select tools that will take and hold keen edges.

Theory of turning

The two classes of chisels are those intended primarily for cutting, and chisels used only for scraping.

- The cutting chisels are the gouge, skew and parting tool. These are the most used. They are commonly sharpened to a razor edge by honing on both sides.
- The scraping chisels are the flat nose, round nose and spear point. These are not honed on the flat sides-the wire edges produced by grinding are left on to aid in the scraping process. (Fig. 9)

Cutting and Scraping (Fig. 10)

- To cut, the chisel is held so that the sharp edge actually digs into the revolving work to peel off shavings.
- To scrape, the chisel is held at a right angle to the work surface. This tool removes fine particles instead of shavings.

Warning! Many operations require that the cutting chisels be used for scraping, but scraping chisels are practically never used for cutting.

Scraping dulls a chisel much faster, especially the razor sharp cutting chisels.

Cutting is faster than scraping and produces a smoother finish which requires less sanding. However, it is far more difficult to master. Scraping, on the other hand, is far more precise and easier to control.

Shows chisel set for round turning or square cut off.

Shows chisel set in the left side of gear bar for cutting end of workpiece.

Standard tool rest can be used when copy system not in use. (Fig. 11)

The tool rest stock and tool rest are secured beneath the bed rail with lock nuts.

The tool rest can be used parallel with workpiece as well as at 90°for end cutting. (Fig. 12)

MAINTENANCE

Warning! Make certain that the unit is disconnected from power source before attempting to service or remove any component.

CLEANING

Keep machine and workshop clean. Do not allow sawdust to accumulate on the tool. Keep centers clean.
Be certain motor is kept clean and is frequently vacuumed free of dust.Use soap and water to clean painted parts, rubber parts and plastic guards.

LUBRICATION

The shielded ball bearings in this tool are permanently lubricated at the factory. They require no further lubrication.

KEEP TOOL IN REPAIR

- If power cord is worn, cut, or damaged in any way, have it replaced immediately.
- Replace any damaged or missing parts. Use parts list to order parts.

Any attempt to repair motor may create hazard unless repair is done by a qualified service technician. Repair service is available at your nearest Palmgren store.

RYOBI POWER EQUIPMENT

WARRANTY

Subject to the warranty conditions below, this RYOBI tool (hereinafter called “the Product”), is warranted by Ryobi (herein called “the Company”) to be free from defects in material or workmanship for a period of 24 months from the date of original purchase covering both parts and labour. Under the terms of this warranty, the repair or replacement of any part shall be the opinion of the Company or its authorised agent. Should service become necessary during the warranty period, the owner should contact the authorised Ryobi retailer from whom the product was purchased, or the nearest Company branch office. In order to obtain warranty service, the owner must include the Sales Docket and Warranty Certificate to confirm date of purchase. This Product is sold by the dealer or agent as principal and the dealer has no authority from the Company to give any additional warranty or guarantee on the Company’s behalf except as herein contained or herein referred to.

Warranty Conditions

This warranty only applies provided that the Product has been used in accordance with the manufacturer's recommendations under normal use and reasonable care (in the opinion of the Company) and such warranty does not cover consumable components, damage, malfunction or failure resulting from misuse, neglect, abuse, or used for a purpose for which it was not designed, or is not suited and no repairs, alterations or modifications have been attempted by other than an Authorised Service Agent. This guarantee will not apply if the tool is damaged by accident or if repairs arise from normal wear and tear.

Accessories such as bits,blades, sanding discs, cutting lines, etc., are excluded from this guarantee. Normal consumable parts, such as carbon brushes, bearings, chucks, cord assembly’s, spark plugs, recoil pulleys and bump head assembly’s are specifically excluded from this guarantee.

The Company accepts no additional liability pursuant to this warranty for the costs of traveling or transportation of the Product or parts to and from the sevice dealer or agent - which costs are not included in the warranty.

Nothing herein shall have the effect of excluding, restricting or modifying any conditions, warranty, right or liability imposed, to the extent only that such exclusion, restriction or modification would render any term herein void.

RYOBI®

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THIS WARRANTY FORM SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES.

For your record and to assist in establishing date of purchase (necessary for in-warranty service), please keep your purchase docket and this form, completed with the following particulars.

PURCHASED FROM:.....

ADDRESS OF DEALER:.....

DATE:..... MODEL NO..... SERIAL NO.....

Present this form with your Purchase Docket when Warranty Service is required.