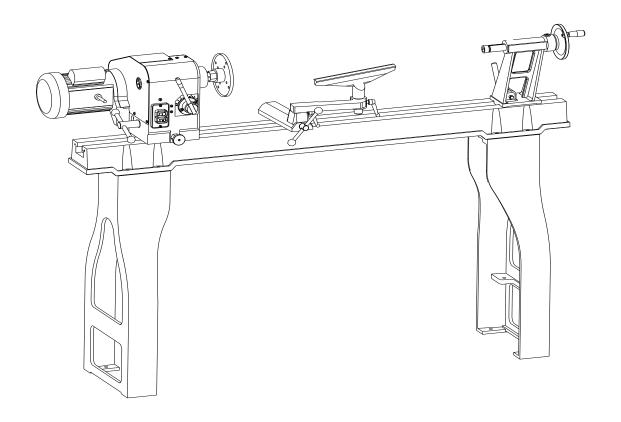
# MODEL MC1100B VARIABLE SPEED WOOD LATHE



# **INSTRUCTION MANUAL**

Please read and fully understand the instructions in this manual before operation. Keep this manual safe for future reference.

### **TECHNICAL DATA**

Model number	MC1100B
Speeds	500-2000RPM
Distance between centers	1100mm(43in.)
Swing over bed	408mm(16in.)
Drive spindle through hole	10mm
Tailstock spindle through hole	10mm
Tailstock spindle travel	54mm
Headstock spur	spur center-Morse#2Taper
Tailstock center	Ball bearing center-Morse#2Taper
Net weight	95kgs

# **GENERAL SAFETY RULES**

**WARNING!** WHEN USING ELECTRIC TOOLS BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND PERSONAL INJURY, INCLUDING THE FOLLOWING.

Read all these instructions before attempting to operate this product and save these instructions.

#### **SAFETY RULES**

#### 1. Keep work area clear

Cluttered areas and benches invite injures.

#### 2. Consider work area environment

Do not expose tools to rain. Do not use tools in damp or wet locations. Keep work area well lit. Do not use tools in the presence of flammable liquids or gases.

#### 3. Guard against electric shock

Avoid body contact with earthed or grounded surfaces.

#### 4. Keep other persons away

Do not let persons especially children involved in the work area and touch the tools or the extension cord and keep them away from the work area.

#### 5. Store idle tools

When not in use, tools should be stored in a dry locked up place out of reach of children.

#### 6. Do not force the tool

It will do the job better and safer at the rate for which it was intended.

#### 7. Use the right tool

Do not force small tools to do the job of a heavy-duty tool.

#### 8. Dress properly

Do not wear loose clothing or jewelry, they can be caught in moving parts. Non-skid footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.

#### 9. Use protective equipment

Use safety glasses. Use face or dust mask if cutting operations create dust.

#### 10. Connect dust extraction equipment

If devices are provided for the connection of dust extraction and collecting equipment, ensure

these are connected and properly used.

#### 11. Do not abuse the cord

Never yank the cord to disconnect it from the socket. Keep the cord away from heat oil and sharp edges.

#### 12. Secure work

Where possible use clamps or a vice to hold the work, it is safer than using your hand.

#### 13. Do not overreach

Keep proper footing and balance at all times.

#### 14. Maintain tools with care

Keep tools sharp and clean for better and safer performance.

Follow instructions for lubricating and changing accessories.

Inspect tool cords periodically and if damaged have them repaired by an authorized service facility.

#### 15. Disconnect tools

When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

#### 16. Remove adjusting keys and wrenches.

Form habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

#### 17. Avoid unintentional starting

Ensure switch is in "off" position when plugging in.

#### 18. Use outdoor extension leads

When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.

#### 19. Stay Alert

Watch what you are doing, using common sense and do not operate the tool when you are tired.

#### 20. Check damaged parts

Before further use of tool, it should be carefully checked to determine that it will operate properly and perform its intended function.

Check for alignment of moving parts, binding of moving parts, breakage of parts, and any other conditions that may affect its operation.

A guard or other part that is damaged should be properly repaired or replaced by an authorized service center .

Have defective switches replaced by an authorized service center.

Do not use the tool if the switch does not turn it on and off.

#### 21. Warning!

The use of any accessory or attachment other than that recommended in this instruction manual may present a risk of personal injury.

#### 22. Have your tool repaired by a qualified person

Repairs should only be carried out by a qualified person using original spare parts, otherwise may result in considerable danger to the user.

# Specific safety rules for the wood lathe

**WARNING!** Do not operate your wood lathe until it is completely assembled and installed

according to the instructions.

- 1. For your own safety, read the entire instruction manual before operating the lathe.
- 2. Always wear eye protection.
- 3. Do not wear gloves, neckties, or loose clothing.
- 4. Tighten all locks before operating.
- 5. Do not mount a split workpiece.
- 6. Use the lowest speed when starting to cut a new workpiece.
- 7. Read the warning label attached to the wood lathe.
- 8. When turning a workpiece, always rough the wood to round form please. Stop wood lathe at slow speed. If the lathe is runing so fast that it vibrates, there is a risk that the workpiece will be thrown out or the tool jerked from your hands.
- 9. Always rotate the workpiece by hand before turning on the lathe. 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 out from the lathe.
- 11. Do not operate the lathe if it is rotating in the wrong direction.

The workpiece must always be rotating toward you.

- 12. Before attaching a workpiece to the faceplate, always rough it out to make it as round as possible, this minimizes the vibrations while the piece is being turned. Always fasten the workpiece securely to the faceplate, failure to do so could result in the workpiece being thrown away from the lathe.
- 13. Position your hands so that they will not slip onto the workpiece.
- 14. Remove all loose knots in the stock before mounting it between the centers or on the faceplate.

#### Save these safety rules!

# **Electrical information**

#### **Guidelines for using extension cords**

**WARNING!** THIS WOOD LATHE IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

Make sure your extension cord is in a good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. The table below shows the correct size to use according to cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

# Extension cord sizes shown assure a voltage drop of not more than 5% at rated load of tool.

Ampere rating (on name plate)	3	6	10	13			
Extension cord length	Wire size mm <sup>2</sup>						
7.5m	0.75	0.75	1.0	1.25			
15m	0.75	0.75	1.0	1.5			
22.5m	0.75	0.75	1.0	1.5			
30m	0.75	0.75	1.25	1.5			
45m	0.75	1.25	1.5	2.5			

**WARNING!** THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRICAL SHOCK.

#### **SAVE THESE SAFETY RULES!**

# **Assembly**

#### **Unpacking (Fig 1)**

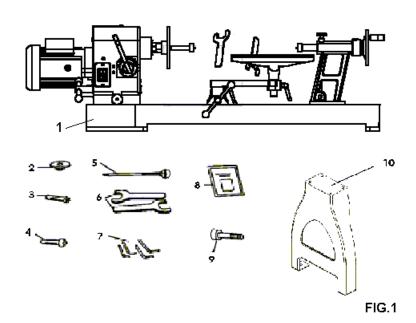
1. Carefully remove the leg set and wood lathe from the carton.

**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 ASSEMBLE THE LATHE TO THE LEG SET.

- 2. Separate the parts for the leg set from the parts of the lathe.
- 3. Lay out all parts and check them against the parts listed below. Examine all parts carefully.

**WARNING!** IF ANY PART IS MISSING OR DAMAGED, DO NOT PLUG THE WOOD LATHE IN UNTIL YOU HAVE REPLACED THE MISSING OR DAMAGED PART.

For you safety, complete the assembly of the lathe before plugging it into the power supply.

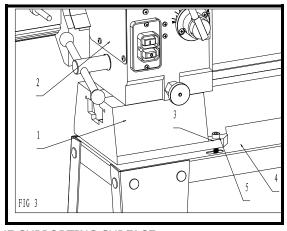


- 1. Lathe bed assembly
- 2. Face plate
- 3. Headstock spur center
- 4. Tailstock cup center
- 5. Push rod
- 6. Flat wrenches
- 7. Hex key
- 8. Instruction panel
- 9. Hex bolt
- 10. Front leg & rear leg

# **Assembly**

#### Setting the lathe on the leg set (Fig 3)

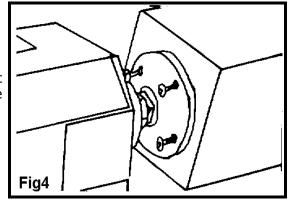
- 1. Place the lathe bed assembly [1] on the leg set.
- 2. Position the headstock [2] assembly over the top plate and align the holes in the bed [3] with the holes in the top plate [4]. Set the headstock down carefully.
- 3. Align the tailstock assembly end of the lathe over the top plate mounting holes and set it down carefully.
- 4. Insert the hex bolts [5] into the mounting holes in each bed and tighten securely.



**IMPORTANT!** THE LEG SET MUST BE FASTENED TO THE SUPPORTING SURFACE.

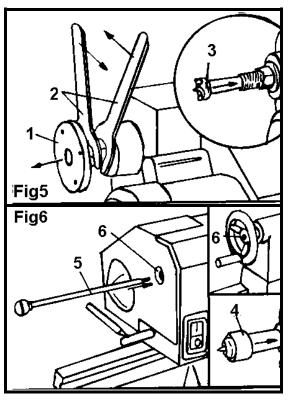
#### Faceplate (Fig 4)

- 1. Remove the headstock spur from the spindle.
- 2. Thread the 6 inch diameter faceplate to the Spindle.
- 3. Mount the workpiece to the faceplate with the flat head brass wood screws. Make sure the length of the screws does not interfere with the cutting tools.



#### **Spurs**

- 1. Remove the faceplate [1] from the headstock spindle using the two wrenches provided [2] to separate the faceplate from the spindle nut. (Fig5)
- 2. Insert the headstock spur [3] in the spindle hole.
- 3. Insert the live center [4] in the tailstock hole. (Fig 6)
- 4. To remove either the headstock spur or the tailstock center insert the push-out rod [5] into the hole [6] at the opposite end of the headstock or tailstock. Remove and store the rod in a safe location after use.

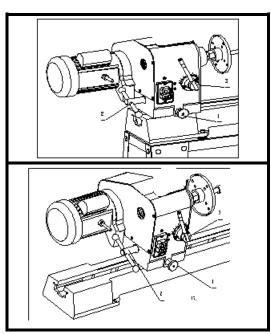


**WARNING!** Do not operate your wood lathe until it is completely assembled and adjusted according to the instructions.

# **Adjustments**

#### **Headstock (Fig 7)**

- 1. The headstock has 5 preset positions,  $0^{\circ}$  setting for all spindle turning applications,  $60^{\circ}/90^{\circ}/120^{\circ}$  for use when making face plate turnings,  $180^{\circ}$  for use for face plate turnings when using the extension bed and tool rest.
- 2. To set the headstock at the desired position, you must first turn the head lock handle [2] until you have completed at least one rotation. (Fig 8)
- 3. Pull out the headstock release [1], rotate the entire headstock clockwise to the desired position. The headstock will be fixed in position when it clocks into one of the five pre-set settings. Tighten the lock handle [2].



# **Operation**

#### Switch (Fig 9)

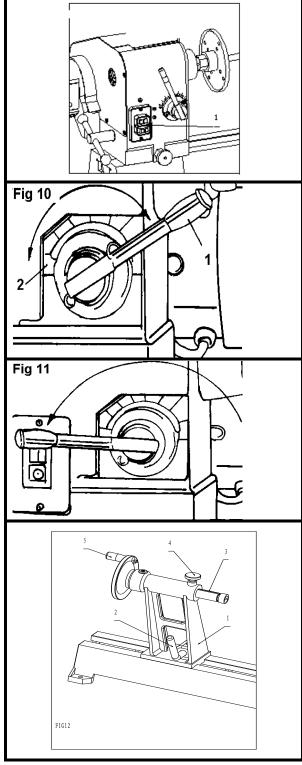
The lathe is fitted with a no-volt switch. In the event of a power supply failure the wood lathe needs to be manually re-started by pushing the "I" button on the switch.

#### **Speed control (Fig 10)**

- 1. The lathe motor must be running before you can use the speed control lever.
- 2. The speed control lever can be turned to one of ten fixed speeds. To set the speed, pull back on the lever handle [1] and rotate the handle to the next fixed speed. Use the index plate [2] to choose right lathe speed.
- 3. Turn the lever clockwise to increase the speed and turn counterclockwise to decrease the speed.
- 4. You must move the speed control lever to the lowest speed setting before turning the switch off (Fig 11), otherwise the motor may not start or be damaged.

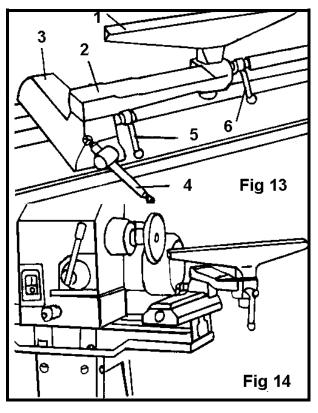
#### Tailstock (Fig 12)

- 1. Move the tailstock [1] by loosening the lock lever [2] and pushing the tailstock to the desired position on the bed. Lock by tightening the lock lever [2].
- 2. The spindle can extend up to 57mm from the tailstock housing. You can move the tailstock spindle [3] by loosening the spindle lock lever [4] and then turning the hand wheel [5]. Lock the levers [4] and [2] before operating lathe.
- 3. The tailstock spindle is hollow and can be accessed from the hand wheel end. Use the push-out rod to remove the center cup or to drill holes through the center of a workpiece.



#### Tool rest (Fig 13)

- 1. The tool rest [1] can be used with or without the arm [2].
- 2. To move the tool rest base [3], loosen the lock lever [4], and move the base to the right or left and back or front. Tighten the lever [4] when the tool rest base is in the desired position.
- 3. When using the arm [2], make the necessary adjustments using lick levers [5] and [6] to position the tool rest.
- 4. Tighten all tool rest lever and handles [4-5-6] and ensure there is adequate clearance between the workpiece and the tool rest assembly before turning the lathe on.
- 5. The tool rest can also be repositioned to the extension bed for use on outboard turnings. (Fig 14)



**IMPORTANT**! MAKE SURE THE TOOL REST IS ADJUSTED TO BE AS CLOSE TO THE WORKPIECE AS POSSIBLE. ROTATE THE WORKPIECE BY HAND TO CHECK CLEARANCE BEFORE TURNING THE LATHE ON.

# **Maintenance**

**WARNING!** FOR YOUR OWN SAFETY, PUSH THE BUTTON "O" ON THE SWITCH AND REMOVE THE PLUG FROM THE ELECTRICAL OUTLET BEFORE PERFORMING MAINTENANCE OR LUBRICATION WORK ON THE LATHE.

- 1. Blow out dust accumulated inside the motor, housing, and bed assembly frequently.
- 2. A coat of automotive wax applied to the bed will help keep the surface clean and keep the smooth movement of the tool rest and tailstock.
- 3. Periodic lubrication of the spring levers and other threaded parts will make these parts easier to operate.

## **PART LIST**

Part No	Description	Size	Q'ty	Part No	Description	Size	Q'ty
W1	Screw	M5X8	4	W50	"C" ring	24	1
W2	Cover – motor		1	W51	Lever		1
W3	Hex screw	M8X30	3	W52	Handle		1
W4	Washer		3	W53	Screw	M8x25	1
W5	Motor		1	W54	Nut	M8	2
W6	Pin-injection		1	W55	Screw	M5x12	2
W7	"C" ring	24	1	W56	Plate		1
W8	Screw	M6	2	W57	Bed		1
W9	Motor Pulley Set, L&R		1	W58	Bolt	M8x35	8
W10	"C" ring	62	1	W59	"C" ring	19	1
W11	Bearing	6007	1	W60	Handle		1
W12	Bracket-Shifting Lever		1	W61	Shaft		1
W13	"C" ring	35	1	W62	Tool Rest Body		1
W14	Rack		1	W63	Nut	M18	1
W15	Switch Box		1	W64	Clamp		1
W16	Headstock		1	W65	Bolt-A		1
W17	Key 4x4x80		1	W66	Handle Assembly		1
W18	"C" ring	16	1	W67	"C" ring	19	1
W19	Sleeve		1	W68	Handle Assembly		1
W20	Spring		1	W69	Extension Tool Rest		1
W21	Spindle Pulley Set, L&R		1	W70	Tool Rest		1
W22	V-Belt 625		1	W71	Center		1
W23	"C" ring	16	1	W72	Shaft		1
W24	Plastic Jaw Nut M20x1.5		3	W73	Tailstock		1
W25	Power Wire		1	W74	Tail Spindle		1
W30	Wrench		2	W75	Quill Locking Screw		1
W31	Drive Center		1	W76	Cone Set Screw		1
W32	Disc		1	W77	Handle Wheel		1
W33	Spindle		1	W78	Handle		1
W34	Key 4x4x80		1	W79	"C" ring	10	1
W35	Bearing	6205	1	W80	Special Bolt		1
W36	"C" ring	52	1	W81	Clamp		1
W37	"C" ring	52	1	W82	Nut	M10	1
W38	Bearing	6205	1	W83	Screw	M5x12	2
W40	"C" ring	24	1	W84	Plate		1
W41	Label for Sped		1	W85	Washer	8	4
W42	Gear Assembly		1	W86	Nut	M8	4
W43	Screw	M5x12	2	W87	Leg		1
W44	Screw	M4x12	3	W88	Leg		1
W45	Angular setting assembly		1	W89	Switch		1
W46	Special Screw		1				
W47	Index Bracket		1				
W48	Clamp		1				
W49	Nut	M18	1				

