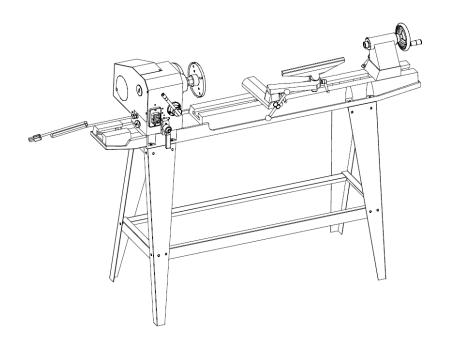
## **OWNERS MANUAL**



12"X36" - Variable Speed Wood Lathe

# 12"X36" VARIABLE SPEED WOOD LATHE <u>Table of Contents</u>

General Safety Instructions	Page3
Specific Safety Instructions	Page4
Tool Features	Page 5
Electrical Information	Page 6
Operating Controls	Page 7
Assembly Instructions Carton Contents Leg Set Assembly Installing Lathe On Leg Set Headlock Handle Spurs Face Plate Extension Bed Headstock Tailstock Articulated Tool Rest	Page 7 Page 8 Page 9 Page 9 Page 10 Page 10 Page 11 Page 12
Operation Power Switch Speed Control	Page 13 Page 13
Wiring Diagram	Page 13
Maintenance	Page 14
Parts Diagram	
Parts List	Page 16

### **GENERAL SAFETY INSTRUCTIONS**

EXTREME CAUTION SHOULD BE USED IN OPERATING ALL POWER TOOLS. KNOW YOUR POWER TOOL, BE FAMILIAR WITH ITS OPERATION. READ THE OWNER'S MANUAL AND PRACTICE SAFE USAGE PROCEDURES AT ALL TIMES.

- CONNECT your machine ONLY to the matched and specified power source.
- □ WEAR SAFETY GLASSES, RESPIRATORS, HEARING PROTECTION and SAFETY SHOES when operating heavy machinery. <u>Always wear safety glasses.</u>
- **DO NOT** wear loose clothing or jewellery when operating machinery.
- A Safe Environment is important. Keep the area free of dust, dirt and other debris in the immediate vicinity of the machine.
- BE ALERT! Do Not Use prescription or other drugs that may affect your ability or judgement to safely use this machine.
- DISCONNECT the power source when changing drill bits, hollow chisels or making other adjustments or repairs.
- NEVER leave an operating tool unattended.
- □ **NEVER** reach over the table when the tool is in operation.
- □ **ALWAYS** keep blades, knives or bits sharp and properly aligned.
- □ **ALWAYS** keep all safety guards in place and ensure their proper function.
- ALWAYS use push sticks and feather boards to safely feed your work through the machine.
- ALWAYS make sure that any tools used for adjustments are removed before operating the machine.
- □ **ALWAYS** secure your work with the appropriate clamps or vices.
- ALWAYS keep bystanders safely away while operating machinery.
- □ THINK SAFETY. WORK SAFELY. Never attempt a procedure if it does not feel safe or comfortable.

### SPECIFIC SAFETY RULES FOR THE WOOD LATHE

Read and understand the entire owner's manual before operating the lathe. Read and understand the warning labels on the lathe. **ALWAYS** wear a safety face shield or safety goggles. Before turning on the wood latheb, make sure all locks are tightened. **Do not** wear gloves, jewelry, neckties or loose clothing. **ALWAYS** inspect your workpiece for splits or defects. Do not attempt to turn a defective workpiece. **ALWAYS** use the slowest speed when rough-turning a new workpiece. **ALWAYS** make sure that your workpiece runs free and clear of the tool rest and any other fixed components that may strike the rotating work. **ALWAYS** be sure that the tool rest is positioned ABOVE the horizontal center line of the workpiece. **NEVER** allow your turning tools to 'bite' into the turning workpiece. **ALWAYS** 'round' the workpiece before mounting on a faceplate by cutting off as many corners as possible. Make certain that the faceplate is securely mounted to the headstock. Check all stock for loose knots and remove them. Sawdust from some wood species may be toxic. Be aware of this and use the lathe in a wellventilated area, use a dust collection system and wear a dust mask. **NEVER** reach over a rotating workpiece.

# VARIABLE SPEED WOOD LATHE Features

By following the instructions and procedures laid out in this owner's manual, you will receive years of excellent service and satisfaction. This wood lathe is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

Cast-iron bed, headstock, tailstock and tool rest.
Swivel headstock for large, outboard turning.
Articulated tool rest included.
Swing over bed: 12".
Distance between centers: 36".
Overall length: 60".
Tailstock spindle travel: 2-1/4".
Variable speeds: 500 – 2000 RPM(50Hz);
Motor: 230V,50Hz, 550W
Safety power switch included.
Sturdy sheet steel stand included.
Integrated lower accessory shelf included.
Morse #2 taper spur headstock included.
Morse #2 taper 'live' ball bearing tailstock included.
Threaded headstock faceplate included.
Headstock wrench (32mm) included.
Morse taper headstock removal tool included.
Gross weight: 80 kg.

### VARIABLE SPEED WOOD LATHE

### **Electrical Information**

In the event of a malfunction or breakdown, grounding provides the path of least resistance for electrical current to reduce the risk of electrical shock. This lathe is equipped with an electrical cord that has an equipment grounding conductor wire and a grounding plug. The plug MUST be plugged into a matching outlet that is properly installed and grounded in accordance with ALL local codes and ordinances.

**DO NOT MODIFY THE PLUG**. If the plug on the lathe will not fit, have the proper outlet installed by a qualified electrician.

**IMPROPER CONNECTION** of the plug-grounding conductor can result in an electrical shock.

**CHECK** with a qualified electrician if you are not certain that the lathe is properly and safely grounded.

**USE ONLY 3-WIRE EXTENSION CORDS** that have 3-prong grounding type plugs.

Repair or replace a damaged electrical cord immediately.

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

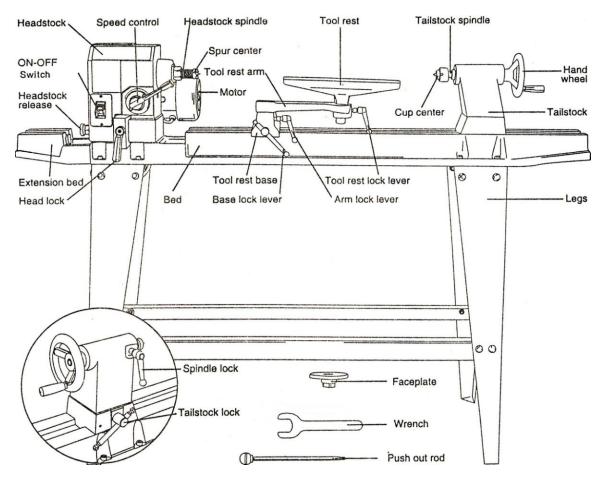
<u>WARNING!</u> THIS WOOD LATHE IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

Make sure your extension cord is in 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.

## Extension lead 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 cable length							
_	Wire size mm²						
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			

## VARIABLE SPEED WOOD LATHE Operating Controls



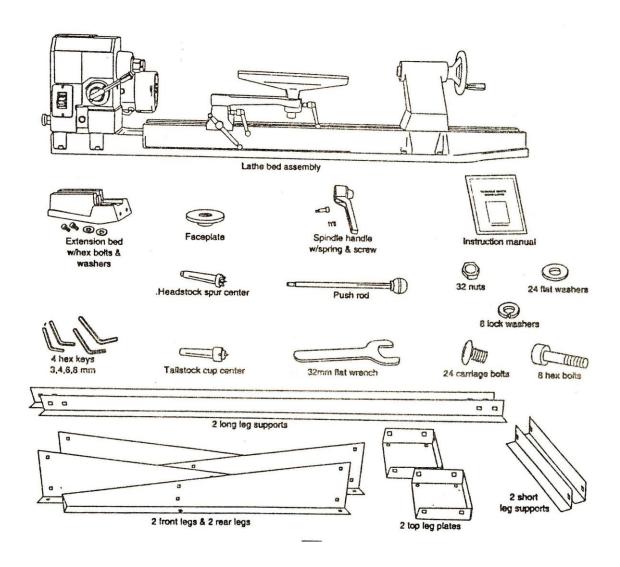
## VARIABLE SPEED WOOD LATHE Assembly Instructions

#### **Carton Contents**

Carefully remove the leg set from the carton and set aside.

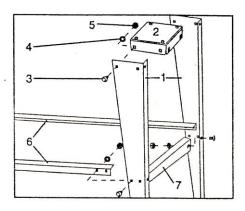
**CAUTION:** The lathe is a heavy machine (80 kg) and must be lifted with assistance to assemble the lathe to the leg set.

- Separate the leg set parts.
- □ Lay out all parts and check them against the parts illustrated below. Examine all parts carefully.



### Leg Set Assembly

- Attach one front leg and one back leg (1) to the outside edges of the top plate (2) using carriage bolts (3), washers (4) and nuts (5). The top plate (2) should fit *inside* the legs (1). Do not tighten nuts at this time.
- Repeat this procedure for the remaining legs and top plate.



- Attach the long stretchers (6) to the legs using carriage bolts, washers and nuts.
- □ Attach the short stretchers (7) on the ends of the legs in the same fashion.
- Place the leg stand on a level surface and tighten all nuts securely using a 14mm wrench.

## Installing the lathe on the leg set CAUTION: The lathe is heavy, use assistance for lifting.

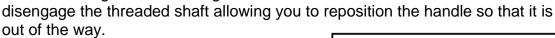
- Place the lathe unit on the leg set.
- Position the headstock (2) assembly over the top plate and align the holes of the lathe bed (3) with the holes in the top plate (4).
- Align the tailstock assembly bolt holes with the top plate holes.
- Install the Allen bolts (5) into all of the mounting holes and through the top plates.
- Install a washer (6) and nut (7) onto
   each bolt and tighten securely with a wrench and the supplied Allen keys.
- Verify that all nuts and bolts are securely fastened.

#### **Headlock Handle**

- □ Locate and assemble the head locking handle (1), spring (2) and Allen bolt (3) as shown.
- □ Thread the head lock assembly into the head locking clamp and tighten.

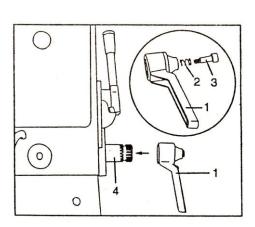
### **Note: Spring loaded handles**

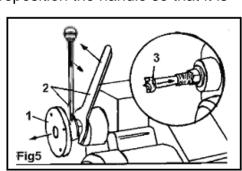
The spring-loaded handles on the lathe are designed to minimize interference with other lathe parts or the workpiece. To operate these handles, push the handle in and rotate clockwise to tighten. Releasing the handle will



### **Spurs**

- Remove the faceplate (if factory installed) (1) from the headstock using the wrench and push rod (2) provided and set aside.
- □ Insert the headstock spur (3) into the



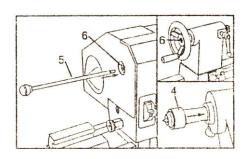


spindle hole.

Install the tailstock live center into the tailstock hole.

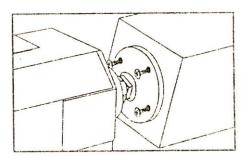
### Removal of spurs

- □ To remove either the headstock spur or the tailstock live center, insert the push rod (5) through the back access holes of the headstock and tailstock.
- Remove the rod and store it for future use.



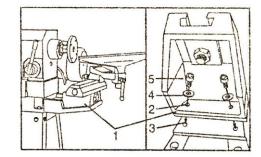
### **Faceplate Installation**

- Remove the headstock spur from the spindle by using the push-out rod.
- □ Thread the 6" diameter faceplate onto the spindle, tighten with the supplied wrench and push rod.
- Mount your workpiece to the faceplate using flat head brass screws. Be certain that the ends of the screws will not interfere with your planned turning.



#### **Extension Bed**

- The extension bed is attached to the left of the headstock for outboard faceplate turning when the use of the articulated tool rest is required.
- If outboard faceplate turning does not require the use of the tool rest, do not attach the extension bed until required.
- □ To attach the extension bed (1) to the lathe bed, align the bolt holes (2) with the threaded bed holes (3).

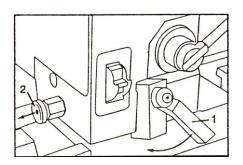


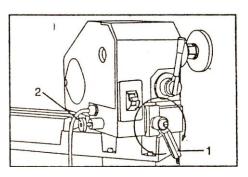
- □ Install a lock washer (4) onto an Allen bolt (5).
- □ Finger tighten and then secure tightly with the Allen key provided.

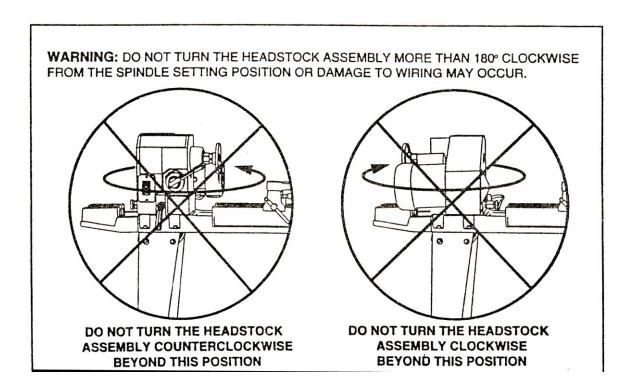
DO NOT ATTEMPT TO OPERATE YOUR LATHE UNTIL IT IS COMPLETELY ASSEMBLED AND ADJUSTED ACCORDING TO THE INSTRUCTION MANUAL.

#### Headstock

- The headstock has 5 pre-set positions. 0 degrees for all spindle turning applications, 60, 90 and 120 degrees for use when making faceplate turnings and 180 degrees when using the extension bed and the tool rest.
- To set the headstock in the desired position you must first turn the headlock handle (1) until you have completed at least one full rotation.
- □ Pull out the headstock release (2).
- Rotate the entire headstock in a clockwise rotation to the desired position. The headstock will 'click' into one of the pre-set settings.
- □ Tighten the headlock handle (1).

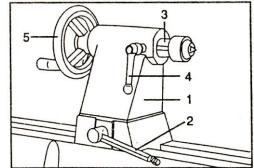






### **Tailstock**

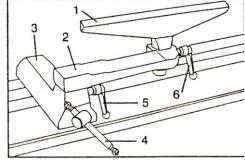
- Move the tailstock (1) by loosening the tailstock lock lever (2) and sliding the tailstock assembly to the desired position on the lathe bed. Securely lock the tailstock into position by tightening the lock lever.
- The tailstock spindle (3) can extend up to 2 1/2" from the tailstock housing. You can move the tailstock spindle by loosening the spindle lock lever (4) and then rotating the spindle hand wheel (5).



- □ Be sure that lock levers (4) and (2) are secure before operating the lathe.
- □ The tailstock spindle is hollow and can be accessed from the hand wheel end. Use the push-out rod to remove the Morse Taper tailstock spindle.

#### **Articulated Tool Rest**

- □ The articulated tool rest (1) may be used with or without the extension arm (2).
- □ To move the tool rest base (3) loosen the lock lever (4) and slide the tool rest base left or right along the lathe bed or it may be moved forward or backwards.
- When using the tool rest extension arm you can loosen lock levers (5) and (6) to make any necessary adjustments.



- □ Be certain to tighten all tool rest locking levers before turning on the lathe.
- □ The articulated tool rest may also be repositioned onto the extension bed for use on outboard turnings.

IMPORTANT: Make sure that the tool rest is adjusted to be as close to the workpiece as possible. Rotate the workpiece by hand to check the clearance *before* turning the lathe on.

## VARIABLE SPEED WOOD LATHE Operation

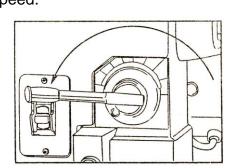
#### **Power Switch**

- The lathe is fitted with a no-volt switch. In the event of a power supply failure the wood lathe need to be manually re-started by pushing the "I" button on the switch.
- NEVER leave a running lathe unattended.



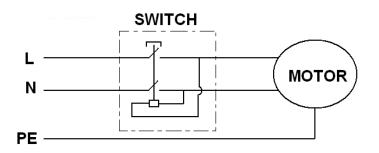
### **Speed Control**

- The lathe motor must be turned on before you can use the speed control lever.
- The speed control lever may be rotated to any one of ten fixed speeds. To set the speed, pull back on the speed control lever (1) and rotate the lever to the desired speed. Use the index plate (2) as a reference to select the desired speed.
- □ Rotating the lever clockwise will increase the speed while a counter clockwise rotation decreases the speed.
- You must move the speed control lever to the lowest speed position before turning the lathe off. Not complying may prevent the motor from starting.



### **WIRING DIAGRAM:**

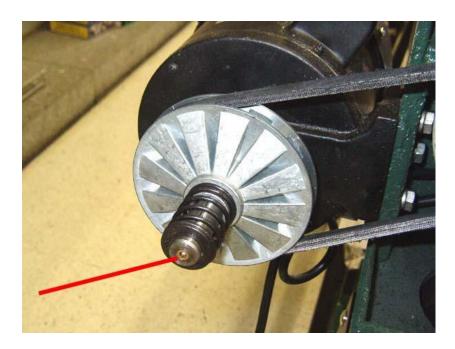
### 220-240V/50Hz, 1 Phase



## VARIABLE SPEED WOOD LATHE <u>Maintenance</u>

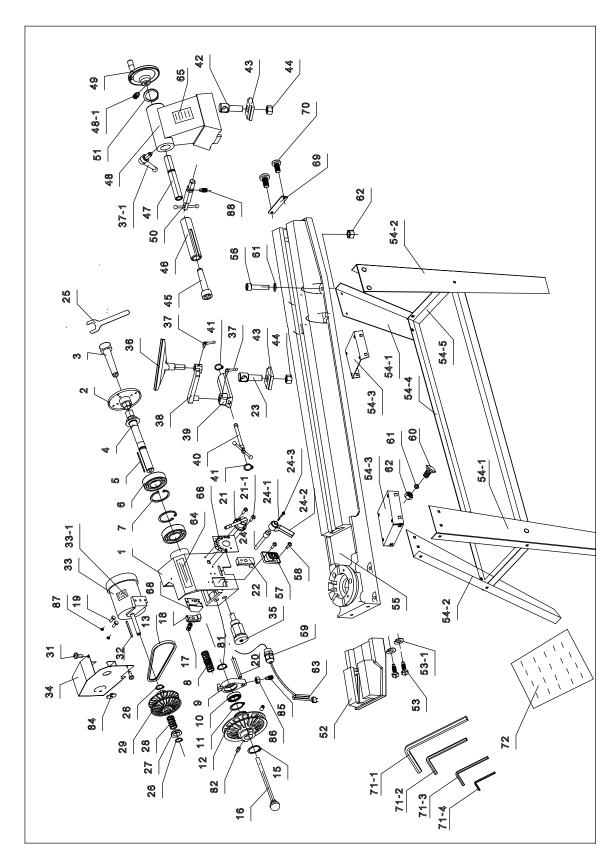
**WARNING -** FOR YOUR OWN SAFETY, TURN THE LATHE OFF AND DISCONNECT THE POWER PLUG FROM THE POWER SOURCE <u>BEFORE</u> PERFORMING ANY MAINTENANCE OR LUBRICATION WORK ON THE LATHE.

- Vacuum and/or blow out any dust accumulation inside the motor housing on a regular basis.
- Apply a coat of paste wax to the lathe bed to help keep it clean and to facilitate the easy movement of the articulated tool rest and tailstock.
- Proper Oiling and maintenance must take place to ensure the quality and life of the machine. To Maintain this, the use of a pin point oiler would be helpful. Take the headstock cover off, and oil the point in the diagram. This should be done periodically.



Periodic lubrication (white grease) of the spring levers and other threaded parts will make them easier to operate and prevent any possible corrosion.

## **WOOD LATHE PARTS DIAGRAM**



## **WOOD LATHE PARTS LIST**

NO.	Description	Qty	NO.	Description	Qty
1	HEADSTOCK	1	44	HEX NUT M18	2
2	DISC	1	45	CENTER	1
3	DRIVE CENTER	1	46	TAIL SPINDLE	1
4	SPINDLE	1	47	TAILSTOCK SCREW	1
5	KEY 4 X 4 X 80	1	48	TAILSTOCK	1
6	BALL BEARING 6205Z	2	48-1	SET SCREW M8 X 20	1
7	C-RING S-52	1	49	HANDWHEEL	1
8	SPRING	1	50	LOCK HANDLE-TAILSTOCK	1
9	BRACKET—SHIFTING LEVER	1	51	SPECIAL WASHER	1
10	BALL BEARING 6007	1	52	EXTENSION BED	1
11	C-RING S-62	2	53	CAP SCREW M10 X 25	2
12	SPINDLE PULLEY SET R & L	3	53-1	LOCK WASHER 10MM	2
13	V-BELT	3	54-1	STAND LEG, LEFT	2
15	C-RING S-16	1	54-2	STAND LEG, RIGHT	2
16	PIN-INJECTION	1	54-3	STAND UPPER COVER	2
17	LOCK NUT	1	54-4	STAND LONG-CROSS SUPPORT	2
18	CLAMP LEFT	1	54-5	STAND SHORT-CROSS SUPPORT	2
19	HEX BOLT	2	55	BED	1
20	RACK	1	56	CAP SCREW M8 x 35	8
21	GEAR ASSEMBLY	1	57	SWITCH	1
21-1	SCREW M5x12	2	58	SCREW M4x12	2
22	CLAMP RIGHT	1	59	PLASTIC JAM NUT M20 X 1.5	1
23	SPECIAL SCREW	1	60	CARRIAGE BOLT M8 x 12	24
24	SHAFT	1	61	WASHER 8MM	24
24-1	SPRING	1	62	HEX NUT M8	1
24-2	LOCK HANDLE	1	63	POWER CORD	1
24-3	SPECIAL CAP SCREW	1	64	NAME LABLE	1
25	WRENCH	1	65	WARNING LABLE	1
26	C-RING S-16	1	66	MOTOR LABEL	1
27	SLEEVE	1	68	SWITCH BOX	1
28	SPRING	1	69	PLATE	2
29	MOTOR PULLEY SET, L & R	1	70	SCREW M5x10	1
31	SCREW M5x8	4	71-1	WRENCH 8MM	1
32	KEY 4X4X82	1	71-2	WRENCH 6MM	1
33	MOTOR	1	71-3	WRENCH 4MM	1
33-1	MOTOR LABEL	1	71-4	WRENCH 3MM	1
34	MOTOR COVER	1	72	MANUAL	1
35	ANGULAR SETTING ASSEMBLY	1	81	C-RING S-35	1
36	TOOL REST	1	82	SCREW M6x10	4
37	HANDLE ASSEMBLY FOR TOOL REST	1	84	COVER	1
37-1	HANDLE ASSEMBLY FOR TAILSTOCK	1	85	SCREW M8x25	1
38	EXTENSION TOOL REST	1	86	NUT M8	2
39	TOOL REST BODY	1	87	WASHER 8MM 2	
40	ECCENTRIC ROD	1	88	SCREW M6x12	1
41	C-RING S-19	2	87	WASHER 8MM	2
	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
42	SPECIAL SCREW	1	88	SCREW M6x12	1