

**VARIABLE SPEED
WOOD LATHE**

Model DB900

INSTRUCTION MANUAL

TABLE OF CONTENTS

SECTION.....	PAGE
Technical data.....	1
General safety rules.....	1-3
Specific safety rules for wood lathe.....	3
Electrical information.....	4
Assembly.....	4-7
Adjustments.....	8-9
Operation.....	10
Maintenance.....	10
Wiring diagram.....	11
Parts break-down.....	11-12
Parts list.....	13

TECHNICAL DATA

Model number.....	DB900
Motor.....	550W
Speeds.....	500-2000RPM
Distance between centers	900mm
Swing over bed.....	305mm
Drive spindle	M33X3.5
Drive spindle through hold	10mm
Tailstock spindle through hole.....	10mm
Tailstock spindle travel.....	57mm
Net weight.....	80kgs
Noise.....	68dB(A)

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 injuries.

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 earthen or grounded surfaces.

4. Keep other persons away

Do not let persons especially children not involved in the work 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 intend.

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 device are provided for the connection do dust extraction and collecting equipment. Ensure these are connected and properly used.

11. Do not abuse the cord

Never rank 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 the 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 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 may affect its operation.

A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual.

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 on 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, necktie, or loose clothing.
4. Tighten all locks before operating.
5. Do not mount a split workplace.
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 form please stop wood lathe at slow speed. If the lathe is run so fast that it vibrates, there is a risk that the workplace will be thrown or the tool jerked from your hands.
9. Always rotate the workplace 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 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 minimizes the vibrations while the piece is being turned. Always fasten the workpiece securely to the faceplate, failure to do this could result in the workpiece being thrown away from the lathe.
14. Position your hands so that they will not slip onto the workpiece.
15. Remove all loose knobs in the stock before mounting 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 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 mm ²			
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.

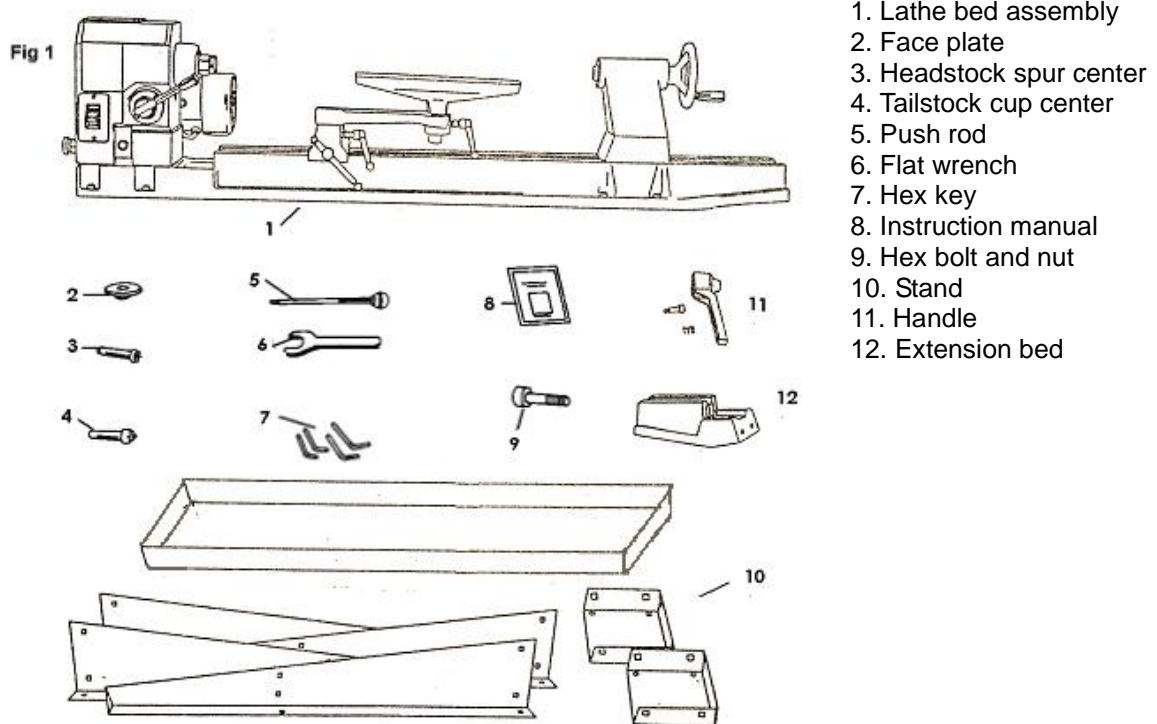
CAUTION! THE WOOD LATHE IS VERY HEAVY AND MUST BE LIFTED WITH THE HELP OF 2 PEOPLE OR MORE. THE ASSEMBLY PROCESS REQUIRES 2 PEOPLE OR MORE TO SAFELY ASSEMBLE THE LATHE TO THE LEG SET.

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



Assembly

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.

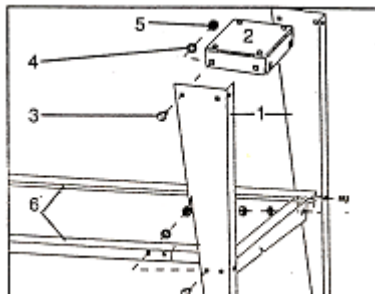


Fig 2

- ❑ Repeat this procedure for the remaining legs and top plate.
- ❑ Attach the long plate (6) to the legs using carriage bolts, washers and nuts.
- ❑ 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.

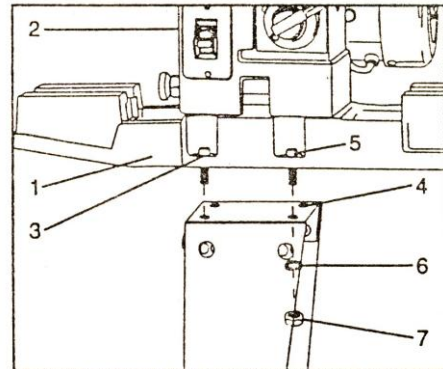


Fig 3

- ❑ 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.
- ❑ Install extension bed (1) to headstock (2) with two bolts and washers.

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

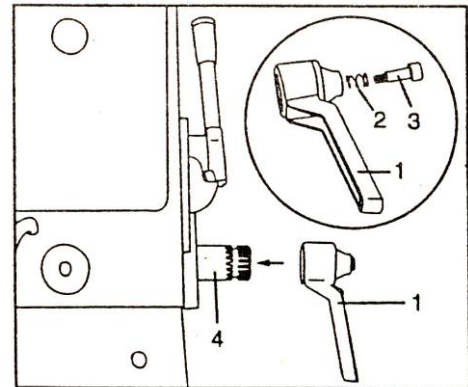


Fig 4

lathe parts or the workpiece. To operate these handles, push the handle in and rotate clockwise to tighten. Releasing the handle will disengage the threaded shaft allowing you to reposition the handle so that it is out of the way.

Install digital readout

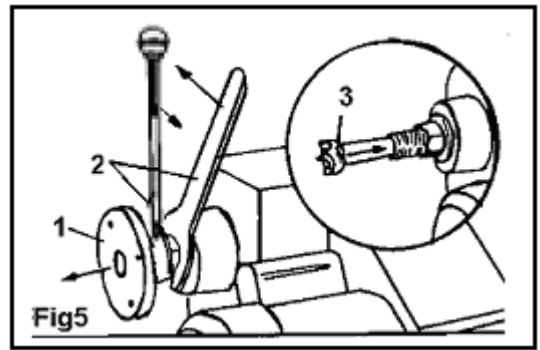
- ❑ Secure the digital readout to the top of headstock, as shown in Fig 4.1.

Fig 4.1



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.

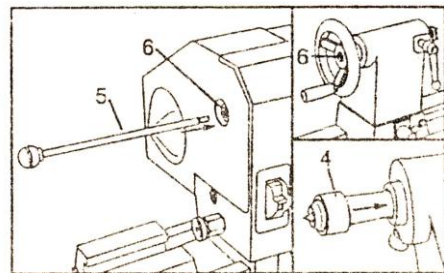
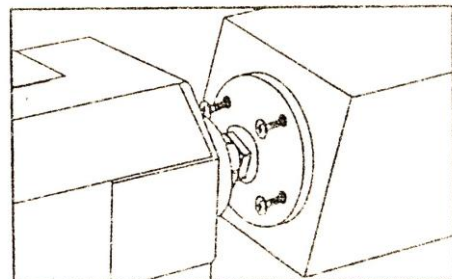


Fig 6

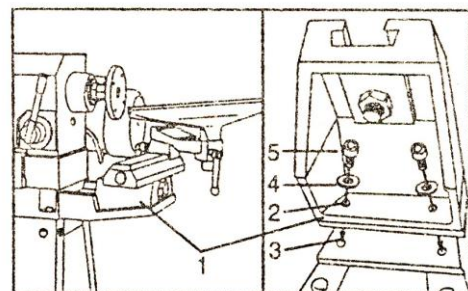
Faceplate Installation

- ❑ Remove the headstock spur from the spindle by using the push-out rod.
- ❑ Thread the 6" diameter faceplate onto the spindle and tighten with the supplied wrenches.
- ❑ 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).



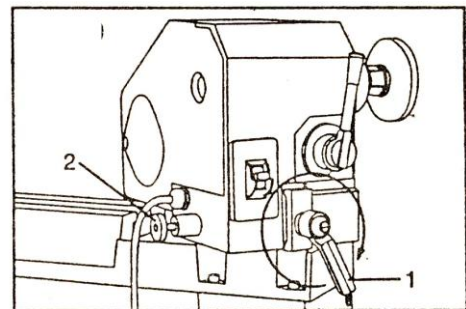
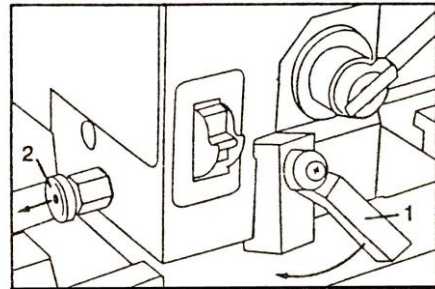
- ❑ Finger tighten and then secure tightly with the Allen key provided.

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

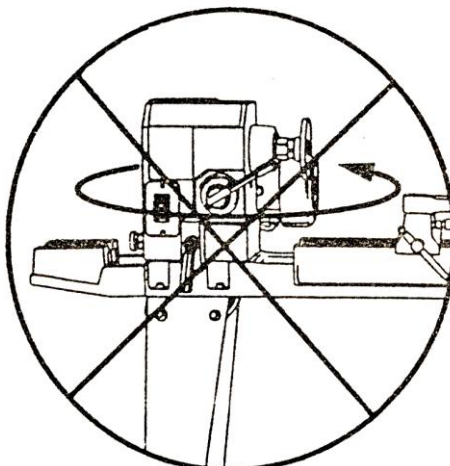
Adjustments

Headstock

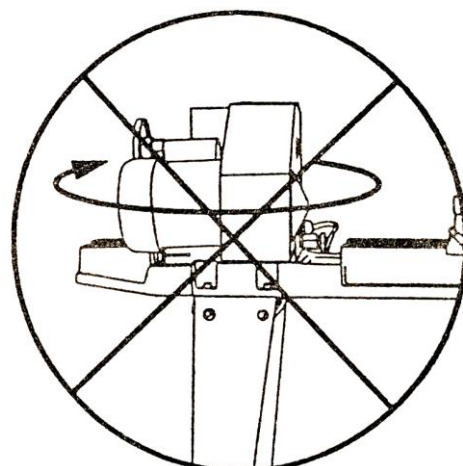
- ❑ The headstock has 5 pre-set positions. 0 degrees for all spindle turning applications, 60, 90 and 120 degrees for use when making faceplate turnings and 180 degrees when using the extension bed and the tool rest.
- ❑ To set the headstock in the desired position you must first turn the headlock handle (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).



WARNING: DO NOT TURN THE HEADSTOCK ASSEMBLY MORE THAN 180° CLOCKWISE FROM THE SPINDLE SETTING POSITION OR DAMAGE TO WIRING MAY OCCUR.



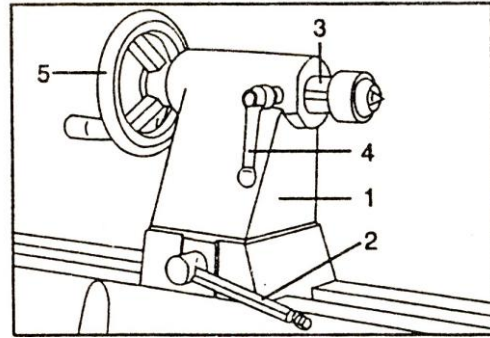
DO NOT TURN THE HEADSTOCK ASSEMBLY COUNTERCLOCKWISE BEYOND THIS POSITION



DO NOT TURN THE HEADSTOCK ASSEMBLY CLOCKWISE BEYOND THIS POSITION

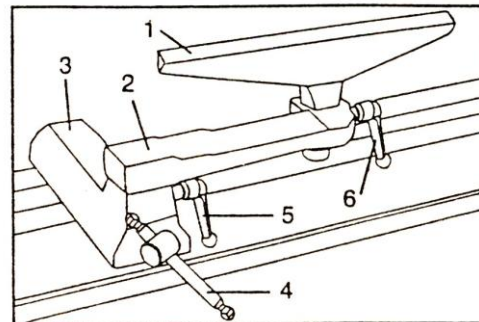
Tailstock

- ❑ 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.

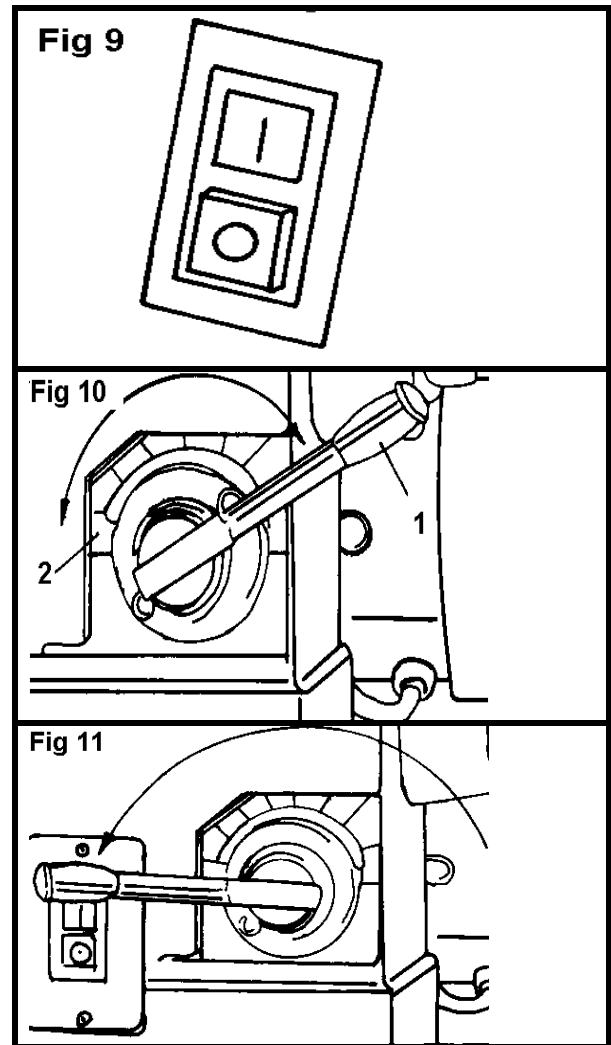
Operation

Switch (Fig 9)

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.

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.

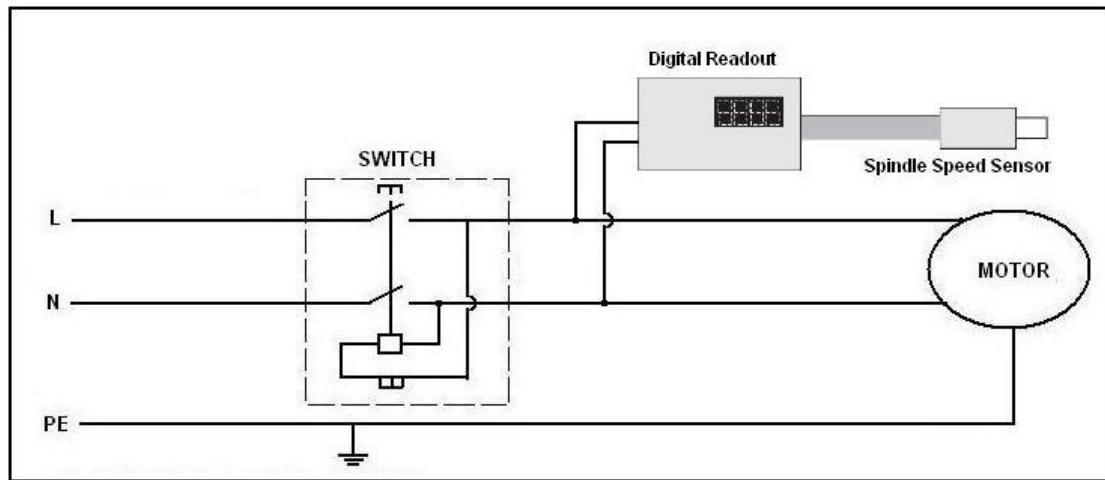


Maintenance

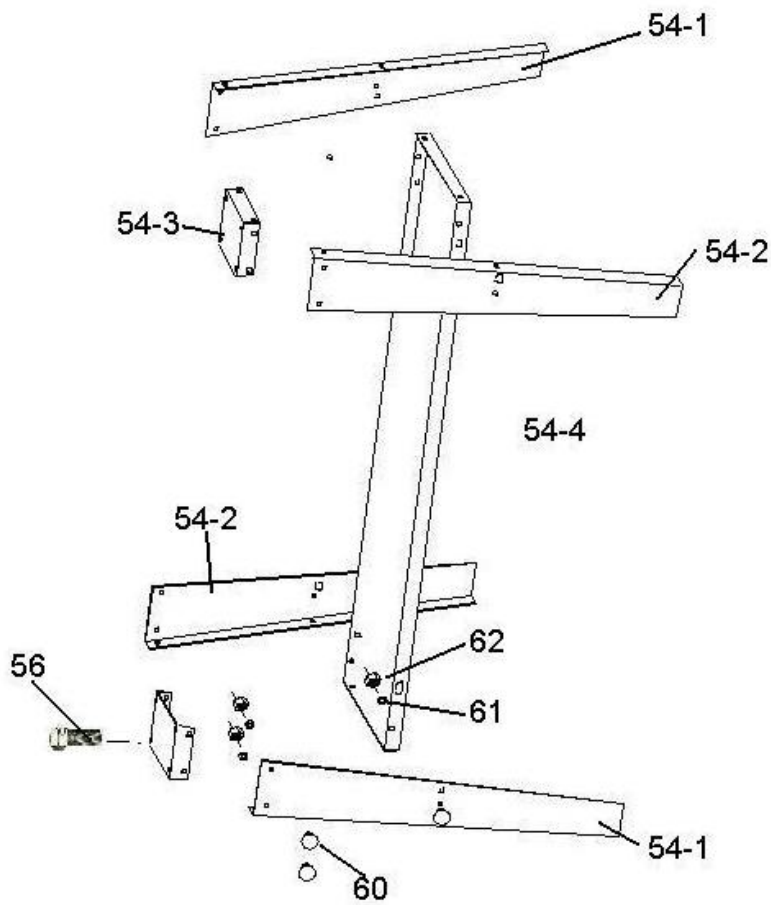
WARNING! FOR YOUR OWN SAFETY, PUSH THE BUTTON "O" ON THE SWITCH AND REMOVE THE PLUG FROM THE ELECTRICAL OUTLET BEFORE PERFORMING MAINTENANCE OR LUBRICATION WORK ON THE LATHE.

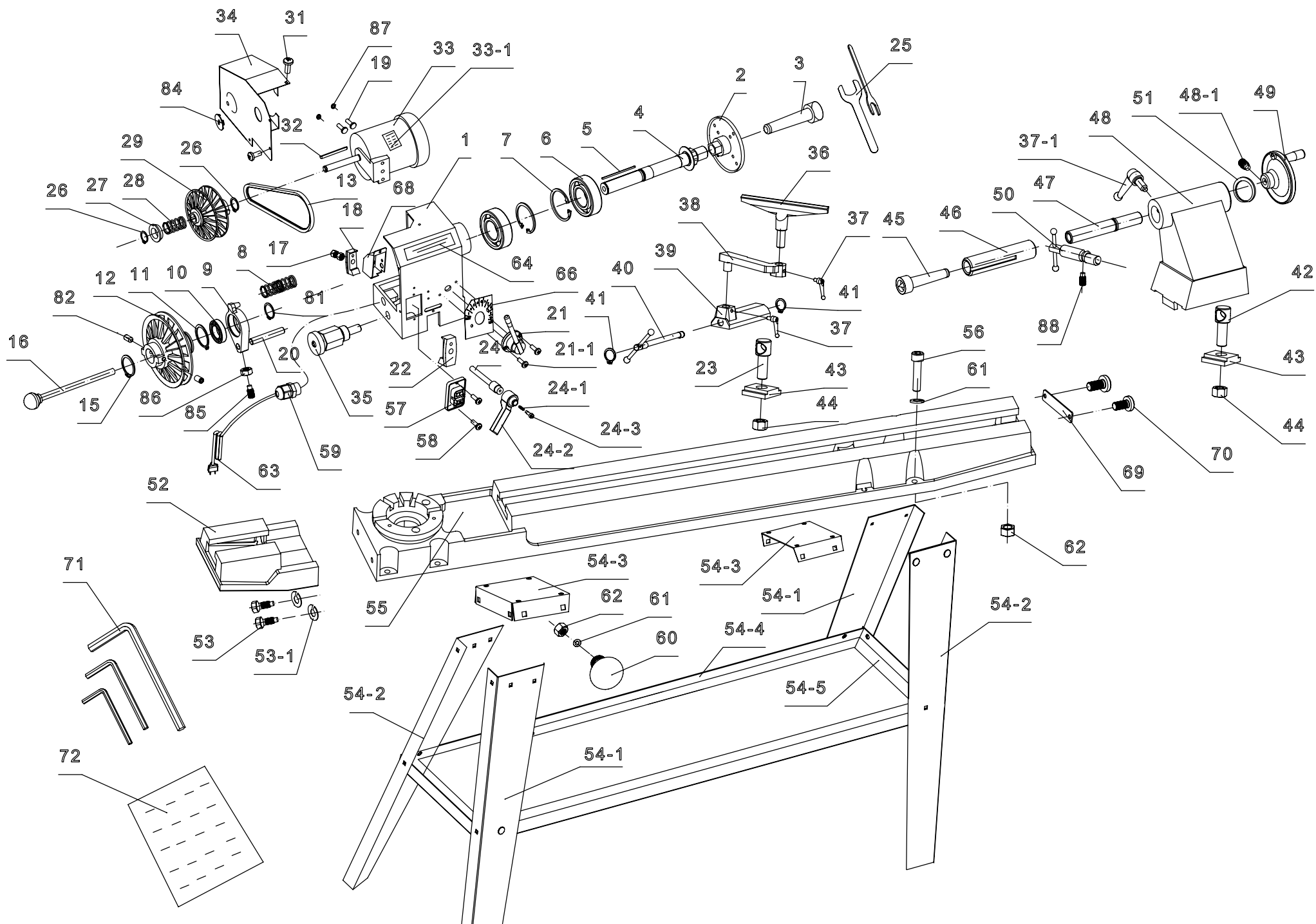
1. Blow out dust accumulation inside the motor, housing, and bed assembly frequently.
2. A coat of automotive wax applied to the bed will help keep the surface clean and keep the movement of the tool rest and tailstock smooth.
3. Periodic lubrication of the spring levers and other threaded parts will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

.Wiring diagram



.Parts break-down





MC900 PARTS LIST:

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