



## OWNERS MANUAL



**B2198 – Variable Speed Wood Lathe**



# B2198 VARIABLE SPEED WOOD LATHE

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## **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. **Always wear safety glasses.**
- ❑ **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 featherboards 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 vises.
- ❑ **ALWAYS** keep bystanders safely away while operating machinery.
- ❑ **THINK SAFETY. WORK SAFELY.** Never attempt a procedure if it does not feel safe or comfortable.

## **B2198 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 B2198, 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 well-ventilated area, use a dust collection system and wear a dust mask.
- ❑ **NEVER** reach over a rotating workpiece.

## **B2198 VARIABLE SPEED WOOD LATHE**

### **Features**

As part of the growing line of **Craftex** woodworking equipment, we are proud to offer the B2198 Variable Speed Wood Lathe. The **Craftex** name guarantees Craft Excellence. By following the instructions and procedures laid out in this owner's manual, you will receive years of excellent service and satisfaction. The B2198 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: 33 1/2".
- ❑ Overall length: 60".
- ❑ Tailstock spindle travel: 2 1/4".
- ❑ Variable speeds: 600 – 2,400 RPM's.
- ❑ Motor: 1/2HP, 110 volt, single phase.
- ❑ Safety (removable key type) 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 wrenches (2 – 32mm) included.
- ❑ Morse taper headstock removal tool included.
- ❑ Gross weight: 75 kg.

## B2198 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 2198 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 2198 lathe is properly and safely grounded.

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

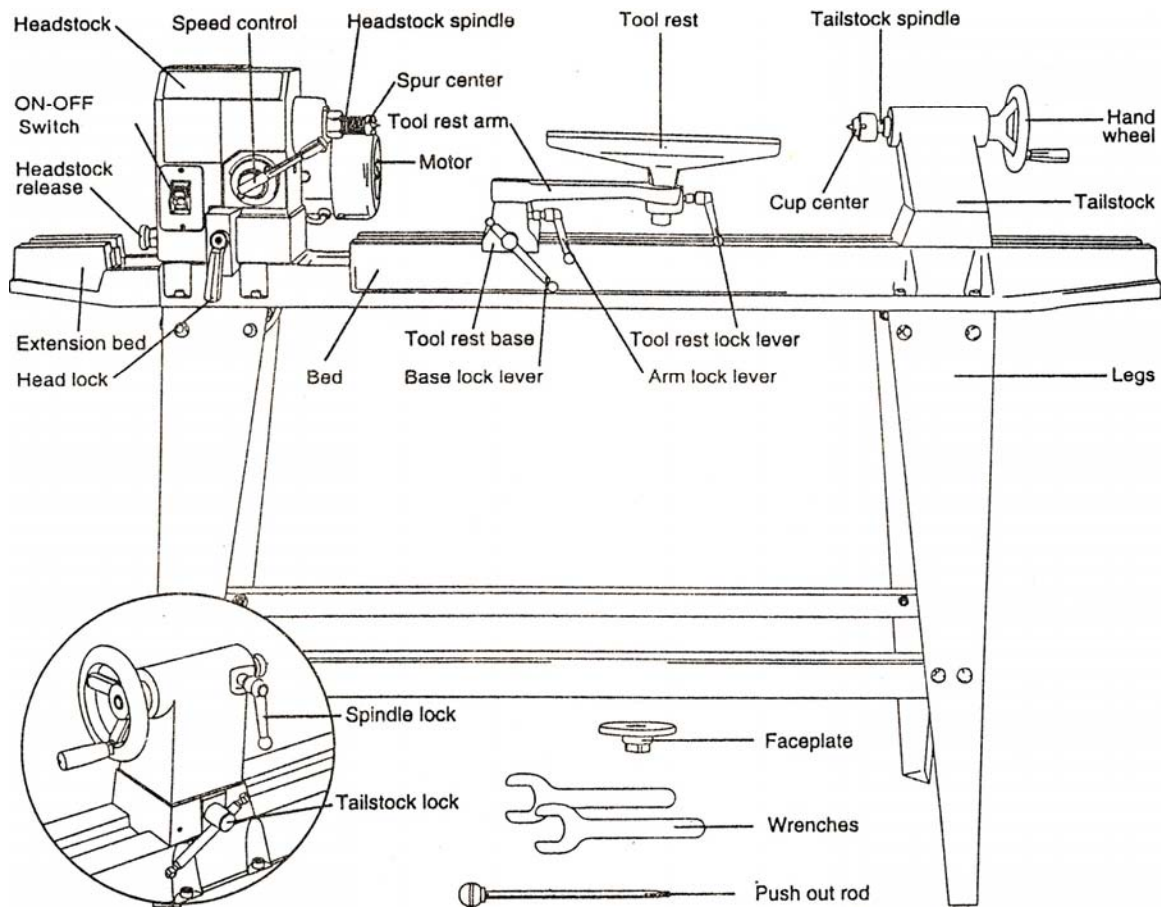
Repair or replace a damaged electrical cord immediately.

MINIMUM GAUGE FOR EXTENSION CORDS (AWG)					
(when using 120 volts only)					
Ampere Rating		Total length of cord in feet			
more than	not more than	25'	50'	100'	150'
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Recommended	

A SEPARATE 15-AMPERE CIRCUIT IS RECOMMENDED FOR STATIONARY POWER TOOLS SUCH AS THIS.

# B2198 VARIABLE SPEED WOOD LATHE

## Operating Controls





## B2198 VARIABLE SPEED WOOD LATHE

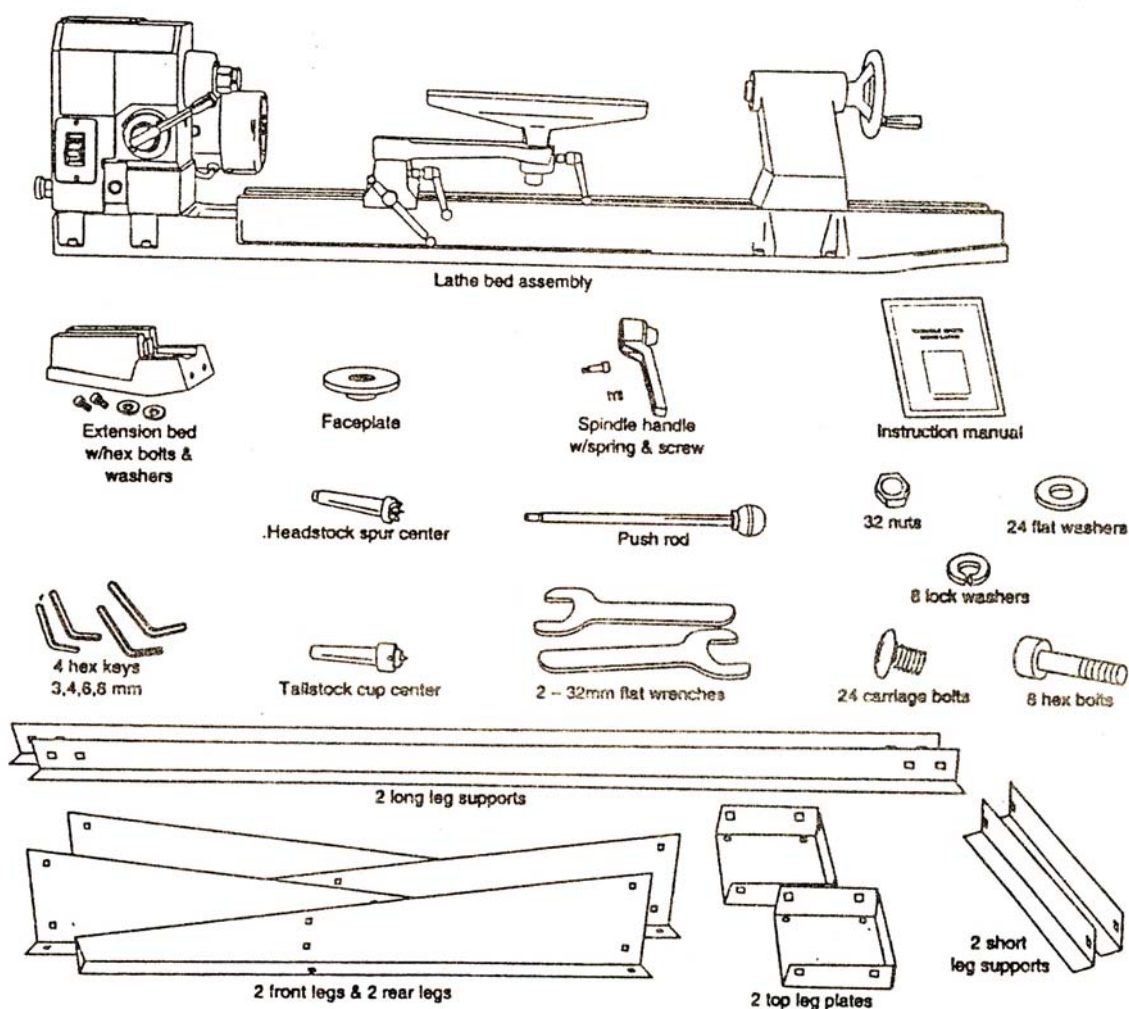
### Assembly Instructions

#### Unpacking

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

**CAUTION:** The B2198 is a heavy machine (75 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.

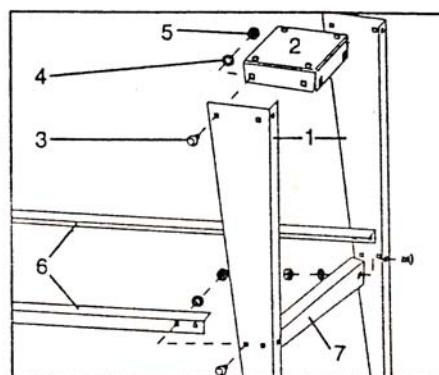




## B2198 VARIABLE SPEED WOOD LATHE Assembly, Continued

### Leg Set Assembly

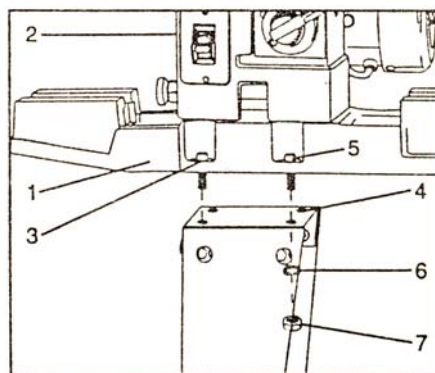
- ❑ Attach one front leg and one back leg (1) to the outside edges of the top plate (2) using carriage bolts (3), washers (4) and nuts (5). The top plate (2) should fit *inside* the legs (1). Do not tighten nuts at this time.
- ❑ Repeat this procedure for the remaining legs and top plate.
- ❑ Attach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

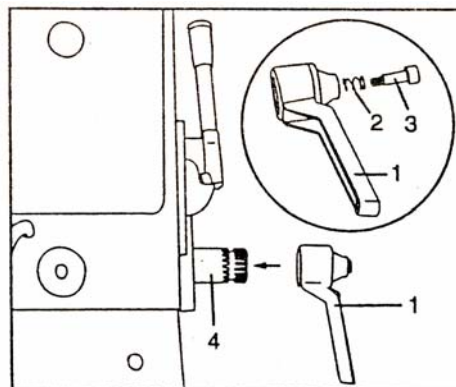


## B2198 VARIABLE SPEED WOOD LATHE

### Assembly, Continued

#### 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.

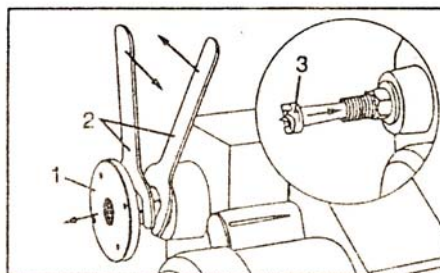


#### Note: Spring loaded handles

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 disengage the threaded shaft allowing you to reposition the handle so that it is out of the way.

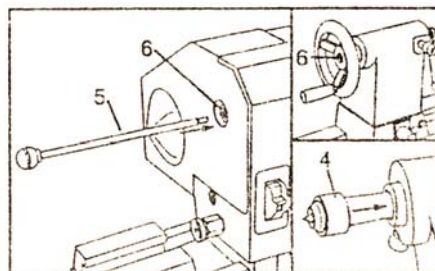
#### Spurs

- ❑ Remove the faceplate (if factory installed) (1) from the headstock using the 2 wrenches (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.

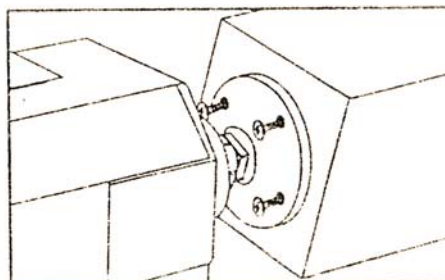


## **B2198 VARIABLE SPEED WOOD LATHE**

### **Assembly, Continued**

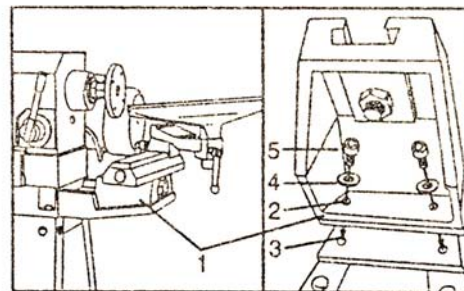
#### **Faceplate Installation**

- ❑ Remove the headstock spur from the spindle by using the push-out rod.
- ❑ Thread the 4" 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.



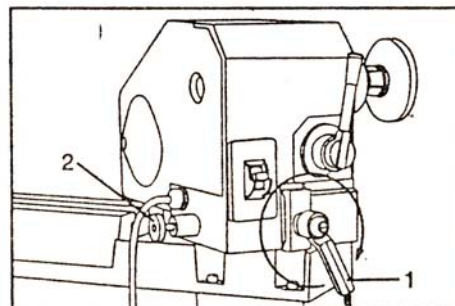
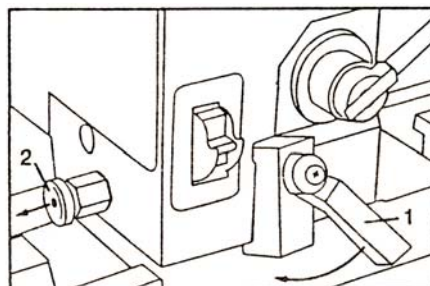
**DO NOT ATTEMPT TO OPERATE YOUR LATHE UNTIL IT IS COMPLETELY ASSEMBLED AND ADJUSTED ACCORDING TO THE INSTRUCTION MANUAL.**

## B2198 VARIABLE SPEED WOOD LATHE

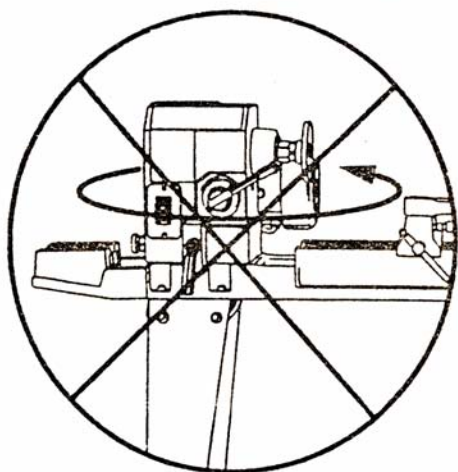
### Adjustments

#### Headstock

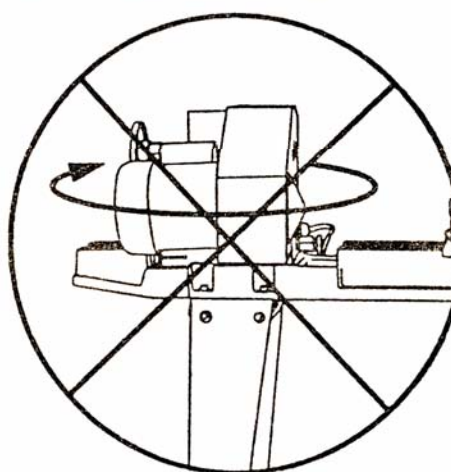
- ❑ The headstock has 5 pre-set positions. 0 degrees for all spindle turning applications, 60, 90 and 120 degrees for use when making faceplate turnings and 180 degrees when using the extension bed and the tool rest.
- ❑ To set the headstock in the desired position you must first turn the headlock handle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



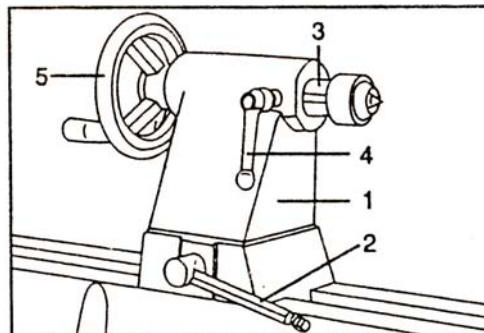
**DO NOT TURN THE HEADSTOCK ASSEMBLY CLOCKWISE BEYOND THIS POSITION**

## B2198 VARIABLE SPEED WOOD LATHE

### Operation, Continued

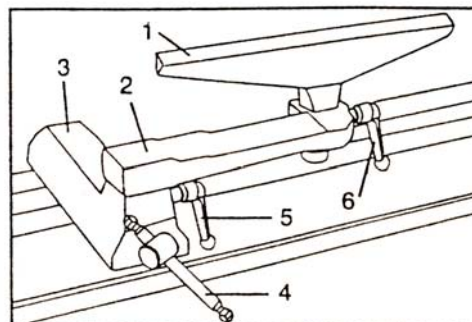
#### Tailstock

- ❑ 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.

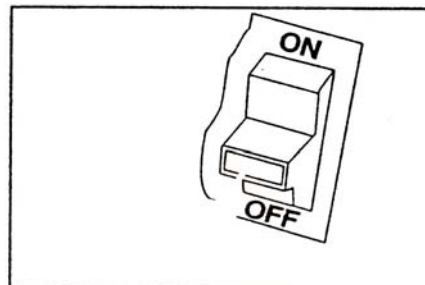


## B2198 VARIABLE SPEED WOOD LATHE

### Operation

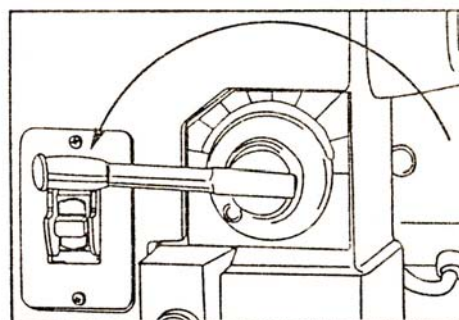
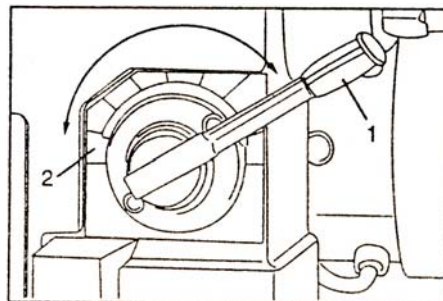
#### Power Switch

- ❑ Your **Craftex** B2198 Variable Speed lathe is equipped with a safety switch to prevent unauthorised use.
- ❑ To turn the lathe 'on', insert the yellow switch key into the switch housing.
- ❑ Move the switch to the 'on' position.
- ❑ To turn the lathe 'off', move the switch to the 'off' position.
- ❑ To lock the switch in the 'off' position, remove the yellow switch key and store it in a safe place.
- ❑ NEVER leave a running lathe unattended.



#### Speed Control

- ❑ The lathe motor **must** be turned on before you can use the speed control lever.
- ❑ The B2198 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.



## B2198 VARIABLE SPEED WOOD LATHE

### Maintenance

**WARNING** - FOR YOUR OWN SAFETY, TURN THE LATHE OFF AND DISCONNECT THE POWER PLUG FROM THE POWER SOURCE BEFORE 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.

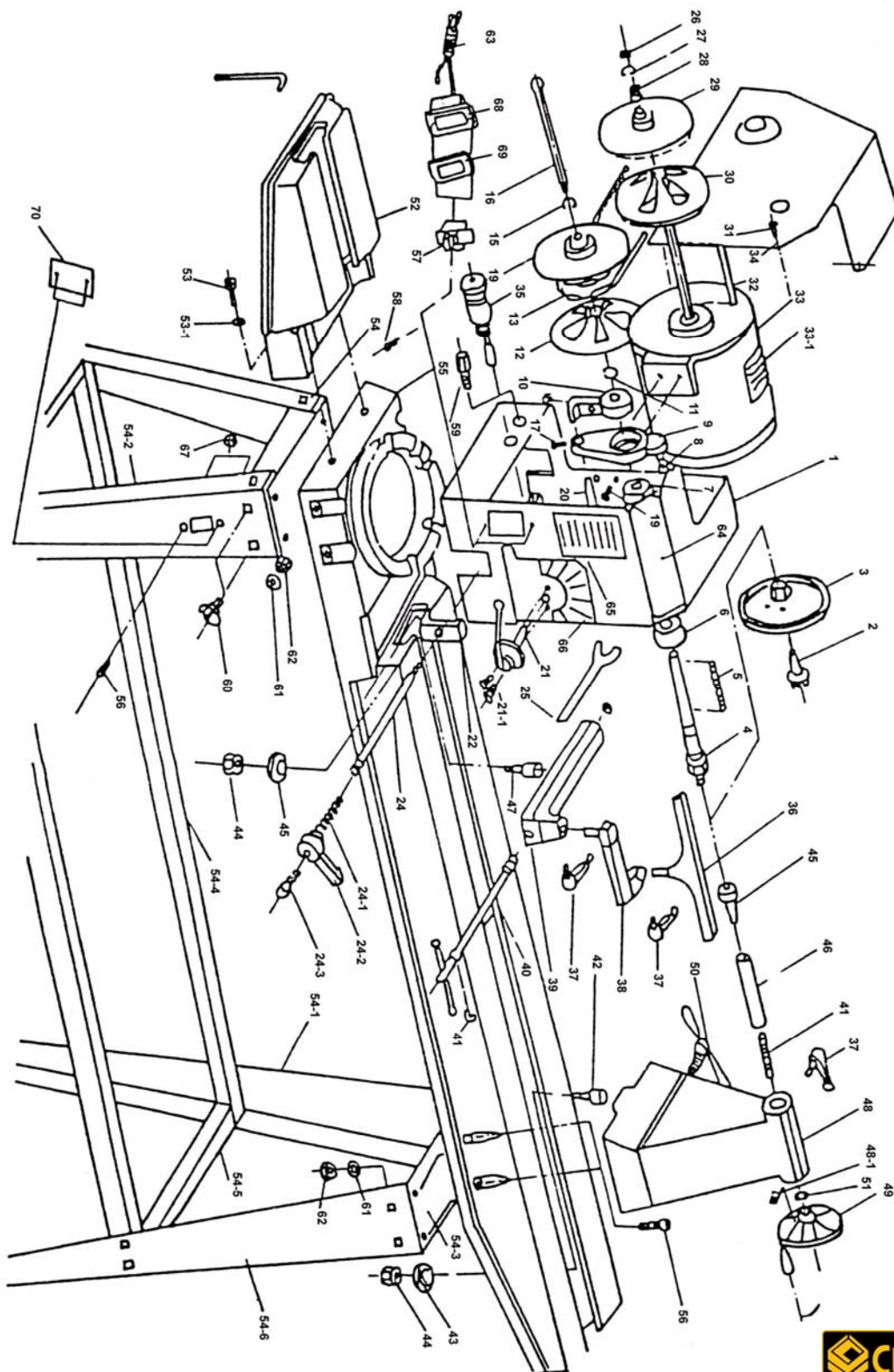


Periodic lubrication (white grease) of the spring levers and other threaded parts will make them easier to operate and prevent any possible corrosion.



## B2198 VARIABLE SPEED WOOD LATHE

### Schematic Diagram



## PARTS LIST

ITEM DESCRIPTION		Q'TY	ITEM DESCRIPTION		Q'TY
M1	HEADSTOCK	1	M39	TOOL REST BODY	1
M2	HEADSTOCK SPUR	1	M40	ECCENTRIC ROD	1
M3	FACEPLATE	1	M41	"C" RING S -19	1
M4	SPINDLE	1	M42	BOLT	2
M5	KEY 4 x 4 x 80 (mm)	1	M43	CLAMP	2
M6	BEARING 80205Z	1	M44	HEX NUT M18	2
M7	BEARING 80205Z	1	M45	TAILSOCK CENTRE	1
M8	SPRING	1	M46	TAIL SPINDLE	1
M9	BRACKET - SHIFTING LEVER	1	M47	TAIL STOCK SCREW	1
M10	BALL BEARING 6006Z	1	M48	TAILSTOCK	1
M11	"C" RING S - 25	1	M48 - 1	SOCKEY HEAD SET SCREW M6X19	1
M12	PULLEY - SPINDLE (RIGHT)	1	M49	HANDLE WHEEL	1
M13	V - BELT	1	M50	LOCK HANDLE - TAILSTOCK	1
M14	PULLEY - SPINDLE (LEFT)	1	M51	WASHER	1
M15	"C" RING S - 24	1	M52	EXTENSION BED	1
M16	PUSH - OUT ROD	1	M53	SCREW M10X25	2
M17	NUT - LOCK M12	1	M53 - 1	SPRING WASHER	2
M18	CLAMP - LEFT	1	M54	STAND ASSEMBLY	1
M19	HEX HD. SCREW M8X25	2	M54 - 1	STAND LEG	1
M20	BACK	1	M54 - 2	STAND SWITCH LEG	1
M21	GEAR ASSEMBLY	1	M54 - 3	STAND UPPER COVER	2
M21-1	HEX SOCKEY HD. SCREW	2	M54 - 4	STAND LONG - CROSS SUPPORT	2
M22	CLAMP - RIGHT	1	M54 - 5	STAND SHORT - CROSS SUPPORT	2
M23	HEX WRENCH	4	M54 - 6	STAND LEG	2
M24	KNOS	1	M55	BED	1
M25	SPINDLE WRENCH	2	M56	SCREW M8X16	8
M26	"C" RING S -16	1	M57	SWITCH	1
M27	SLEEVE	1	M58	SCREW M4X16	2
M28	SPRING	1	M59	PLASTIC JAM NUT M20X1.5	1
M29	PULLEY - MOTOR (RIGHT)	1	M60	CARIAGE BOLT STAND	24
M30	PULLEY - MOTOR (LEFT)	1	M61	WASHER - STAND	24
M31	SCREW MSX10	4	M62	NUT STAND	32
M32	KEY 4x4x85 (mm)	1	M63	POWER CORD	1
M33	MOTOR	1	M54	NAME LABEL	1
M33-1	NAME PLATE FOR MOTOR	1	M55	WARMING LABEL	1
M34	COVER - MOTOR	1	M66	SPEED LABEL	1
M35	ANGULAR SETTING ASSEMBLY	1	M67	NUT M4	2
M36	TOOL REST	1	M68	SWITCH BOX	1
M37	HANDLE ASSEMBLY	3	M69	SWITCH FIXING PLATE	1
M38	EXTENSION TOOL REST	1	M70	COVER	1



## WARRANTY

### ***CRAFTEX 2 YEAR LIMITED WARRANTY***

Craftex warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers **two years** for parts and 90 days for labour (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

*Proof of purchase is necessary.*

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etceteras. Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

## **RETURNS, REPAIRS AND REPLACEMENTS**

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom. Craftex is a brand of equipment that is exclusive to Busy Bee Tools.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY(2879), and have your credit card and part number handy.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- **We do not accept collect shipments.**
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse (see locations on inside back cover of this manual).
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.

***GRAFTEX® TOOLS ARE AVAILABLE EXCLUSIVELY AT ALL BUSY BEE TOOLS LOCATIONS ACROSS CANADA.***

**BUSY BEE TOOLS - - - SHOWROOMS -Coast to Coast**

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**Dartmouth**

133 Ilesley Avenue, Dartmouth, Nova Scotia, B3B 1S9  
Tel. - 902-468-8088, Fax - 902-468-8830

**Barrie**

21 Commerce Park Drive, Barrie, Ontario, L4N 8X1  
Tel. - 705-730-0498, Fax - 705-730-0495

**Pickering**

1064 Salk Road, Pickering, Ontario, L1W 4B5  
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**Calgary**

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Tel - (403) 250-1986, Fax - (403) 250-7768

We have been serving the Canadian woodworking and metalworking industry for over 28 proud years. We stand behind all of our machines. If you have any questions, comments, or concerns, please call or write to our head office or call toll free at 1-800-461-BUSY.

Email us at [busybee@busybeetools.com](mailto:busybee@busybeetools.com) or contact us through our web site at

**busybeetools.com**

