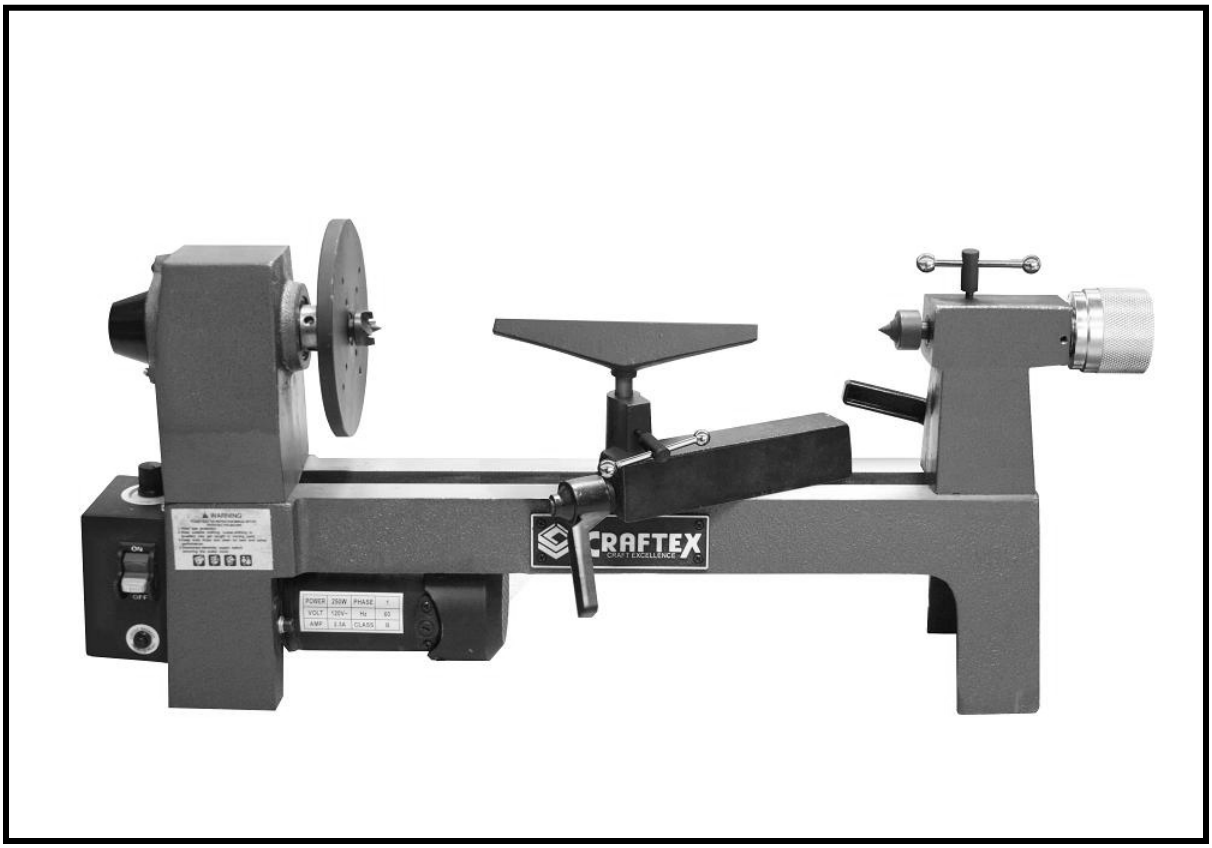
CT172
MINI WOOD LATHE
with VARIABLE SPEED
User Manual



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GENERAL SAFETY INSTRUCTIONS FOR MACHINES

Extreme caution should be used when operating all power tools. Know your power tool, be familiar with its operation, read through the owner's manual and practice safe usage procedures at all times.

- **ALWAYS** read and understand the user manual before operating the machine.
- **CONNECT** your machine ONLY to the matched and specific power source.
- **ALWAYS** wear safety glasses respirators, hearing protection and safety shoes, when operating your machine.
- **DO NOT** wears loose clothing or jewelry when operating your machine. Wear protective hair covering.
- **A SAFE ENVIRONMENT** is important. Keep the area free of dust, dirt and other debris in the immediate vicinity of your machine.
- **BE ALERT! DO NOT** use prescription or other drugs that may affect your ability or judgment to safely use your machine.
- **DISCONNECT** the power source when changing drill bits, hollow chisels, router bits, shaper heads, blades, knives or making other adjustments or repairs.
- **NEVER** leave a tool unattended while it is in operation.
- **NEVER** allow unsupervised or untrained personnel to operate the machine
- **NEVER** reach over the table when the tool is in operation.
- **ALWAYS** keep blades, knives and bits sharpened and properly aligned.
- **ALL OPERATIONS MUST BE** performed with the guards in place to ensure safety.
- **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** keep bystanders safely away while the machine is in operation.
- **NEVER** attempt to remove jammed cutoff pieces until the blade has come to a full stop.

CT172 – MINI WOOD LATHE WITH VARIABLE SPEED SPECIFIC SAFETY INSTRUCTIONS

Like all power tools and machinery, proper safety and attention must be adhered to. There is danger associated with using any tool or machine so pay careful attention each and every time you use your tool. If you are not familiar with the operations of a lathe, you should obtain the advice and/or instructions from a qualified professional.

- **Read this operation manual** carefully and understand it before operating the lathe.
- **Do not over-reach**. Keep proper footing and balance at all times.
- **Maintain machine** in top condition. Keep machine clean for best and safest performance. Follow instructions for lubrication and changing accessories.
- **Disconnect the machine** from power source before servicing, changing accessories, and making any adjustments.
- **To avoid accidental starting**, make sure the switch is in the OFF position before plugging in the power cord.
- **Never leave the machine running** and unattended. Turn the power OFF. Do not leave the machine until it comes to a complete stop.
- **Start and stop the machine yourself**. To avoid accidental injuries make sure not to have anybody help you do this.
- **Always wear a face dust mask** if operation creates a lot of sawdust and/or chips.
- **Always operate** the tools in a well-ventilated area and provide for proper dust removal. Use a dust collection system whenever possible.
- **Turn OFF then machine** before making any adjustments or servicing.
- **Do not attempt** to measure the work-piece size while the machine is running.
- **Make sure** the work-piece is clamped securely between the centers before starting the machine.
- **Only use** correct size centers.
- **After adjusting or servicing** the machine, remember to remove all wrenches or other tools from the machine.
- **Do not use any power tools** while under the effects of drugs, alcohol or any medication.

WARNING

***The safety instructions given above can not be complete because the environment in every shop is different. Always consider safety first as it applies to your individual working conditions*.**

CT172 – MINI WOOD LATHE

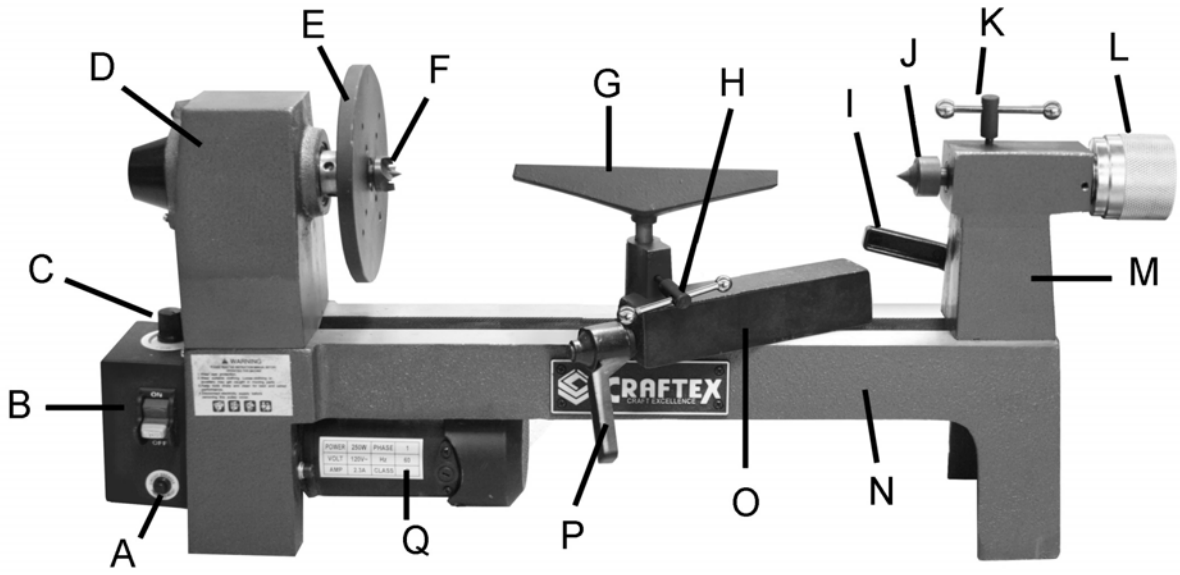
FEATURES

MODEL CT172 – MINI WOOD LATHE WITH VARIABLE SPEED

As part of the growing line of Craftex woodworking equipment, we are proud to offer the CT172, a Mini Wood Lathe with Variable Speed. The Craftex name guarantees Craft Excellence. By following the instructions and procedures laid out in this user manual, you will receive years of excellent service and satisfaction. The CT172 is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

- Main Motor.....120-V, 60-Hz, 250W DC
- Swing Over Bed.....210mm (8.2”)
- Swing Over Tool Rest.....132mm (5.2”)
- Distance Between Center.....305mm (12”)
- Tailstock Travel .....40mm (1.6”)
- Spindle Size.....1” x 8 TPI
- Spindle Taper MT1
- Tailstock Taper.....MT1
- Tool Rests ..... Two; 4.5” & 7”
- Number of Spindle Speeds.....Variable
- Spindle Speed Ranges.....750 RPM to 3200 RPM
- Bed Width.....80mm (3”)
- Faceplate Size.....145mm (5.7”)
- Bed Construction.....Cast Iron
- Headstock Construction.....Cast Iron & Steel
- Tailstock Construction .....Cast Iron & Steel
- Bearings .....Shielded and Lubricated
- Approx. Net/Gross Weight.....20 / 21Kg
- Warranty.....Two Years

CT172 – MINI WOOD LATHE WITH VARIABLE SPEED PHYSICAL FEATURES



A. Re-Set Button
B. On/Off Switch
C. Variable Speed Knob
D. Headstock
E. Faceplate
F. Headstock Center
G. Tool Rest
H. Tool Rest Lock Lever
I . Tailstock Lock Lever
J . Tailstock Center
K. Quill Lock Lever
L . Quill Movement Handwheel
M. Tailstock
N. Lathe Bed
O. Tool Rest Base
P . Tool Rest Base Lock Lever
Q. Motor

PROPER GROUNDING

Grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

CT172 is for use on a normal 110 volt circuit. Make sure that the machine is connected to an outlet having the same configuration as the plug. If an adaptor plug is used, it must be attached to the metal screw of the receptacle. To prevent electrical hazards, have a qualified electrician ensure that the line is properly wired. The lathe should be wired with a plug having 3 prongs to fit a 3 prong grounded receptacle as shown in figure-1. Do not remove the grounding prong to fit it into a 2 pronged outlet.

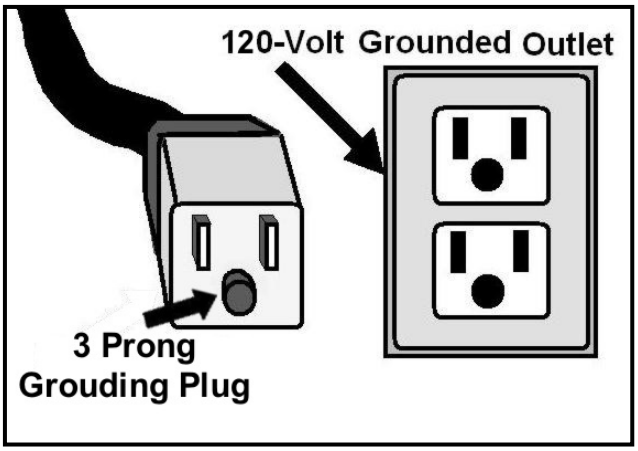


Figure-1 120-Volts outlet for CT172

It is strongly recommended not to use extension cords with your CT172. Always try to position your machine close to the power source so that you do not need to use extension cords.

In case if you really find it necessary to use an extension cord, make sure the extension cord does not exceed 50-feet in length and the cord is 14-gauge to prevent motor damage.

UNPACKING

The machine is properly packaged and shipped complete in a carton for safe transportation. When unpacking, carefully inspect the carton to ensure that nothing has been damaged during transit. Open the carton and check that the grinder and the parts are in good condition.

While doing inventory, if you can not find any part, check if the part is already installed on the machine. Some of the parts come preassembled.

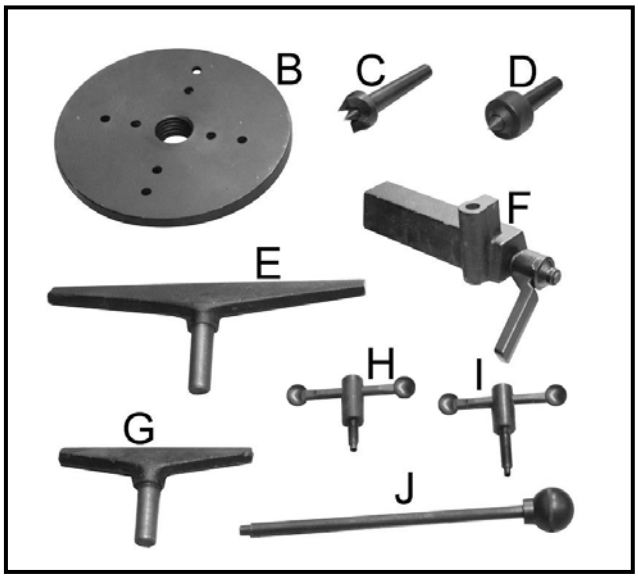


Figure-2 Inventory

LIST OF CONTENTS	QTY
A. Wood Lathe (Not Shown)	1
B. Face Plate	1
C. Headstock Dead Center	1
D. Tailstock Live Center	1
E. Tool Rest (7”)	1
F. Tool Rest Base	1
G. Tool Rest (4.5”)	1
H. Tool Rest Lock Lever	1
I. Quill Lock Lever	1
J. Knockout Bar	1

ASSEMBLY

Before starting assembling your lathe, make sure the switch is in the OFF position and the cord is disconnected from the power source.

TOOL REST

Position the tool rest base on the lathe bed as shown in figure-3 and secure it from the bottom of the bed using nut and screw.

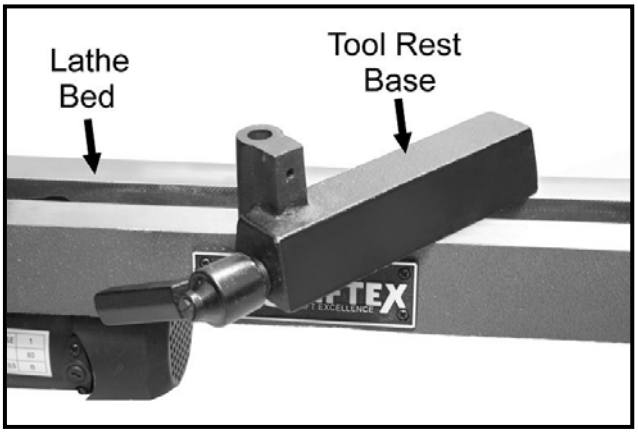


Figure-3 Tool rest base installed

Now, Insert the tool rest into the tool rest base and secure it using the tool rest lock lever. See figure-5.

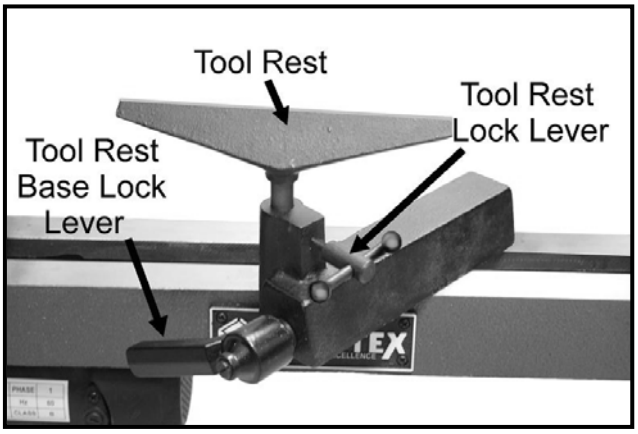


Figure-4 Tool rest installed

You can position the tool rest on the bed by loosening the tool rest lock lever shown in figure-5 and sliding the tool rest. Re-tighten the lock lever to secure the tool rest on the bed when it is in the desired position.

TAILSTOCK LIVE CENTER

The tailstock quill has a taper hole into which the tailstock live center fits. Turn the quill movement hand wheel to bring the quill out. Clean the tailstock center shank and the tailstock quill hole and fit the tailstock center into the taper hole firmly by hand. Tighten the lock lever to lock the quill in position. See figure-5.

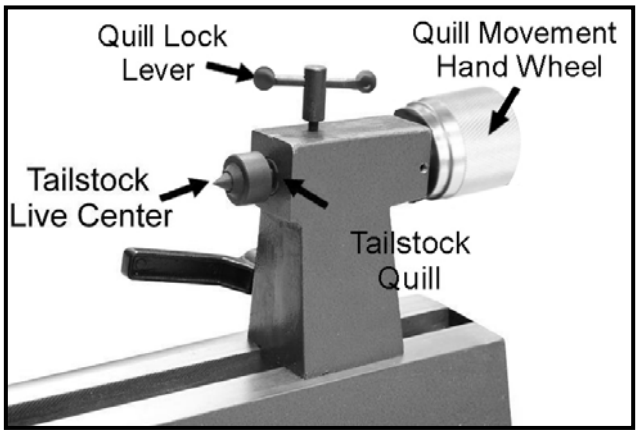


Figure-5 Installing tailstock center

To remove the tailstock center, simply insert the knockout bar from through the hole in the quill movement hand wheel and knockout the tailstock center.

WARNING

Before installing/removing any part of the machine, make sure the switch is in the OFF position and the cord is disconnected from the power source.

FACEPLATE

Thread the faceplate onto the headstock spindle. Hold the spindle using the knock out bar and tighten the faceplate onto the spindle with your hand as shown in figure-6.

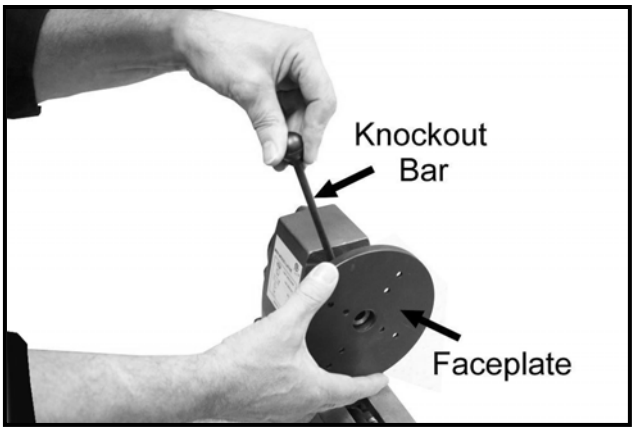


Figure-6 Installing the faceplate

If you want to remove the faceplate, do the above procedure in reverse.

WARNING

Before installing/removing any part of the machine, make sure the switch is in the OFF position and the cord is disconnected from the power source.

HEADSTOCK CENTER

The headstock spindle is designed with a taper hole into which the headstock center fits. Clean the headstock center shank and spindle hole and fit the headstock center firmly by hand, into the headstock spindle through the hole on the faceplate.

To remove the headstock center, use the knockout bar through the hole at the back of the headstock spindle and knock the headstock center out. When knocking out the center, hold it by hand to prevent it dropping down. See Figure-7.

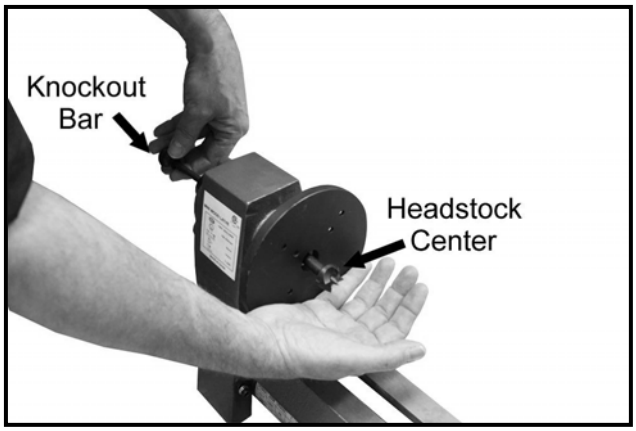


Figure-7 Knocking out the headstock center

TEST RUN

Once you have assembled your lathe completely, it is then time for a test run to make sure that the lathe works properly and is ready for operation.

During the test run if there is any unusual noise coming from the lathe or it excessively, turn OFF the power switch immediately and disconnect from the power source Investigate if you can find out the problem with your machine.

WARNING

Before starting the lathe, make sure that you have read and understood the manual and you are familiar with the functions and safety features on this machine. Failure to do so may cause serious personal injury.

Make sure the ON/OFF switch and the variable speed knob, located on the left side of the lathe, are working properly.

WARNING

Do not make any adjustments while the machine is running. Failure to follow this warning can cause serious personal injuries to the operator and damage to the machine.

ON/OFF SWITCH

The ON/OFF switch on this mini lathe is located on the left side of the machine, attached to the bed.

The switch has a removable locking key to prevent unauthorized operation. If the lathe is not in use for long time, remove the locking key by pulling it put out and store it in a safe place. See figure-8.

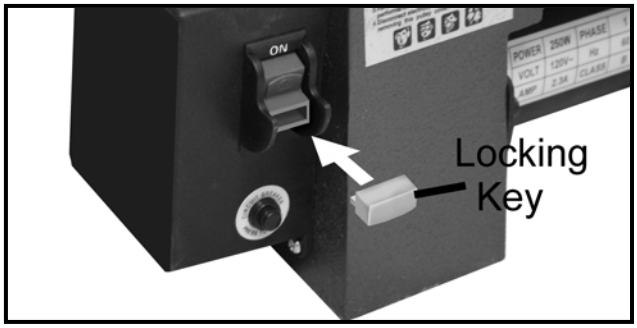


Figure-8 Locking key

To start the lathe, insert the locking key and shift the switch up. To stop the lathe, shift the switch down. See Figure-10

VARIABLE SPEED KNOB

CT172 is a variable speed lathe. You can always increase or decrease the spindle speed while the machine is running, using the variable speed knob shown in figure-9.

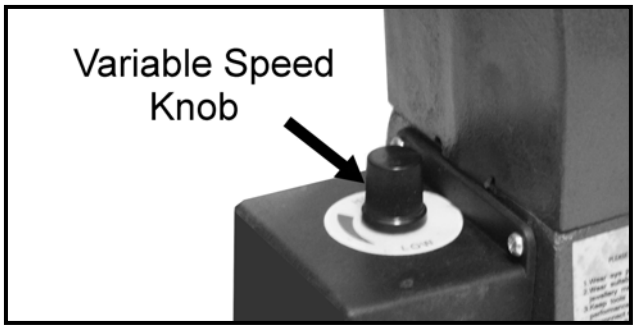


Figure-9 Variable speed knob

RE-SET BUTTON

The CT172 has an overload protection feature which breaks the circuit and disconnects power to the motor when the machine is overloaded. This protects the motor from damage.

The re-set button located under the ON/OFF switch, re-sets the switch and re-connects the power to the motor when pushed in.

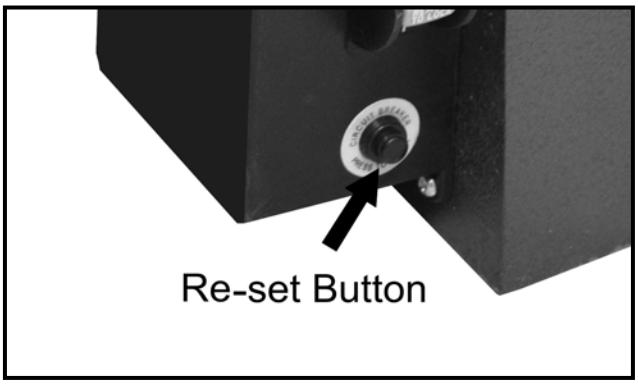


Figure-10 Re-set button

WARNING

Make sure the switch is in the OFF position and the cord is disconnected from the power source before doing adjustments.

TOOL REST ADJUSTMENT

The tool rest base can be moved along the bed slide-ways. Loosen the tool rest base lock lever before adjusting the tool rest base position and tighten the lock lever securely after adjustment.

The tool rest should be adjusted so that its top is 3/16" (suggested below) above the centers. Loosen the tool rest lock lever before adjusting tool rest position. Tighten the lock lever securely after adjustment.

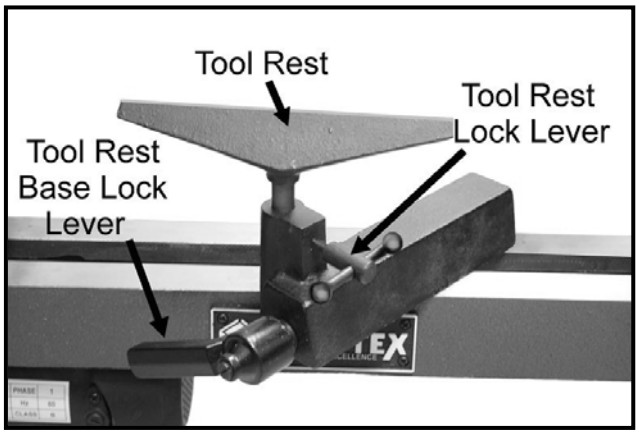


Figure-11 Tool rest base adjustment

TAILSTOCK ADJUSTMENT

The tailstock is used to support the other end of the work-piece to be turned on the lathe. The tailstock can be moved along the bed slide ways. Before moving the tailstock, loosen the tailstock lock lever. Move the tailstock by hand to a desired position, and then re-tighten the tailstock lock lever.

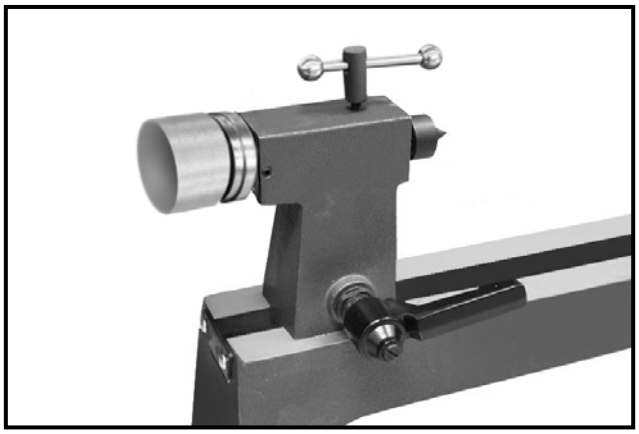


Figure-12 Tailstock adjustment

FACEPLATE

This lathe is furnished with a face plate in case the work-piece to be turned and can not be clamped between the headstock center and the tailstock center.

The faceplate has been drilled with eight holes for clamping the work-piece.

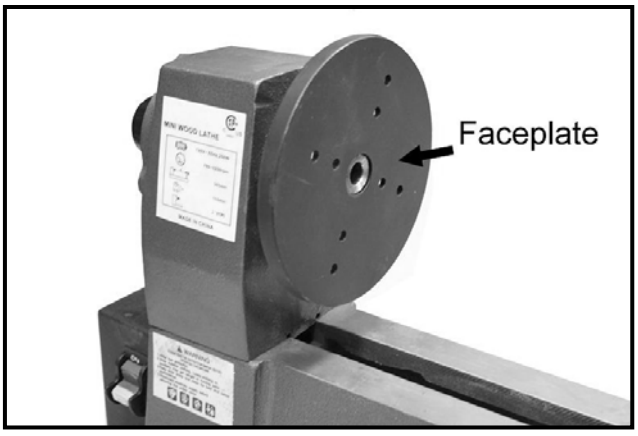


Figure-13 Faceplate

WARNING

Make sure the switch is in the OFF position and the cord is disconnected from the power source before installing, servicing and removing/replacing any components on the machine. Failure to do so may result serious personal injuries.

MAINTENANCE

During the life of your machine, you will need to practice some regular maintenance to keep your lathe in peak performance condition.

1. Check the lathe daily for:

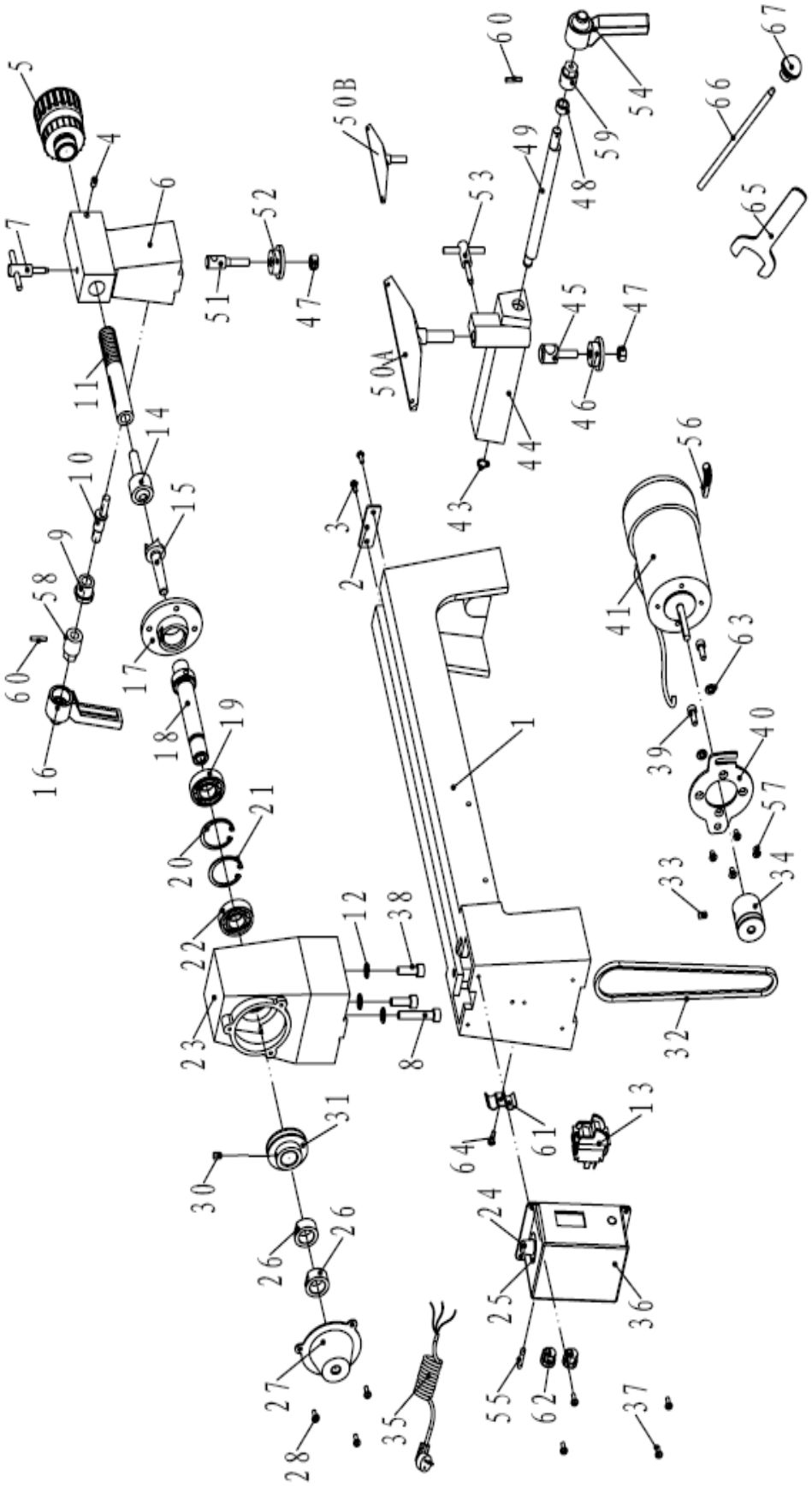
- **A.** Loose mounting bolts
- **B.** Worn or damaged wires
- **C.** Worn switch
- **D.** Any other unsafe condition

2. Protect the unpainted cast iron surfaces of the lathe by clean the chips after every use and wiping with dry piece of cloth.

3. Apply a thin layer of oil on the bed slide ways and the unpainted cast iron surface to keep the bed rust-free.

4. A build up of dust in the motor can cause motor damage. Periodic cleaning of the motor is not only recommended, but mandatory for normal wood lathe performance.

CT172 PARTS BREAKDOWN



CT172 PARTS LIST

PART#	DESCRIPTION	Q'TY	PART#	DESCRIPTION	Q'TY
1	Bed	1	**35**	Power cord	1
2	Retaining plate	1	**36**	Switch box assembly	1
3	Bolt M5×8	2	**37**	Bolt M4×10	4
4	Bolt M6×8	2	**38**	Bolt M8×25	2
5	Hand wheel	1	**39**	Bolt M6×16	2
6	Tailstock	1	**40**	Motor plate	1
7	Spindle lock screw	1	**41**	Motor	1
8	Bolt M8×40	1	**42**	Warning label	1
9	Sleeve	1	**43**	Retaining ringφ10	1
10	Eccentric axis	1	**44**	Tool rest base	1
11	Tailstock sleeve	1	**45**	Bolt M8X27	1
12	Washer φ8	3	**46**	Plate	1
13	Switch	1	**47**	NutM8	2
14	Live center assembly	1	**48**	Sleeve	1
15	Headstock spur center	1	**49**	Eccentric rod	1
16	Tailstock lock handle	1	**50A**	Tool rest 7"	1
17	Face plate	1	**50B**	Tool rest 4.5"	1
18	Headstock spindle	1	**51**	Bolt M8X31	1
19	Ball bearing 6004-2RZ/Z1	1	**52**	Plate	1
20	Retaining ring φ42	1	**53**	lock bolt for tool rest	1
21	Retaining ring φ42	1	**54**	Tool holder lock handle	1
22	Ball bearing 6004-2RZ/Z1	1	**55**	Fuse	1
23	Headstock	1	**56**	Carbon brush	2
24	Speed dial switch	1	**57**	ScrewM5×8	4
25	Speed dial label	1	**58**	Lock sleeve	1
26	Headstock spindle nut 3/4"(1"X16TPI)LEFT	2	**59**	Hex sleeve	1
27	Plate cover	1	**60**	Spring pin	2
28	Bolt M4×10	3	**61**	Cable plate	1
29	Spec label	1	**62**	Wire gasket	2
30	Bolt M6×8	1	**63**	Washer φ6	2
31	Drive pulley	1	**64**	Screw M4×14	1
32	Belt	1	**65**	Wrench	1
33	Bolt M6×10	1	**66**	Push-out rod	1
34	Motor pulley	1	**67**	Knob	1

WARRANTY

CRAFTEX 2 YEARS 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 labor (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 or call 1-800-461-BUSY. 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
- 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.