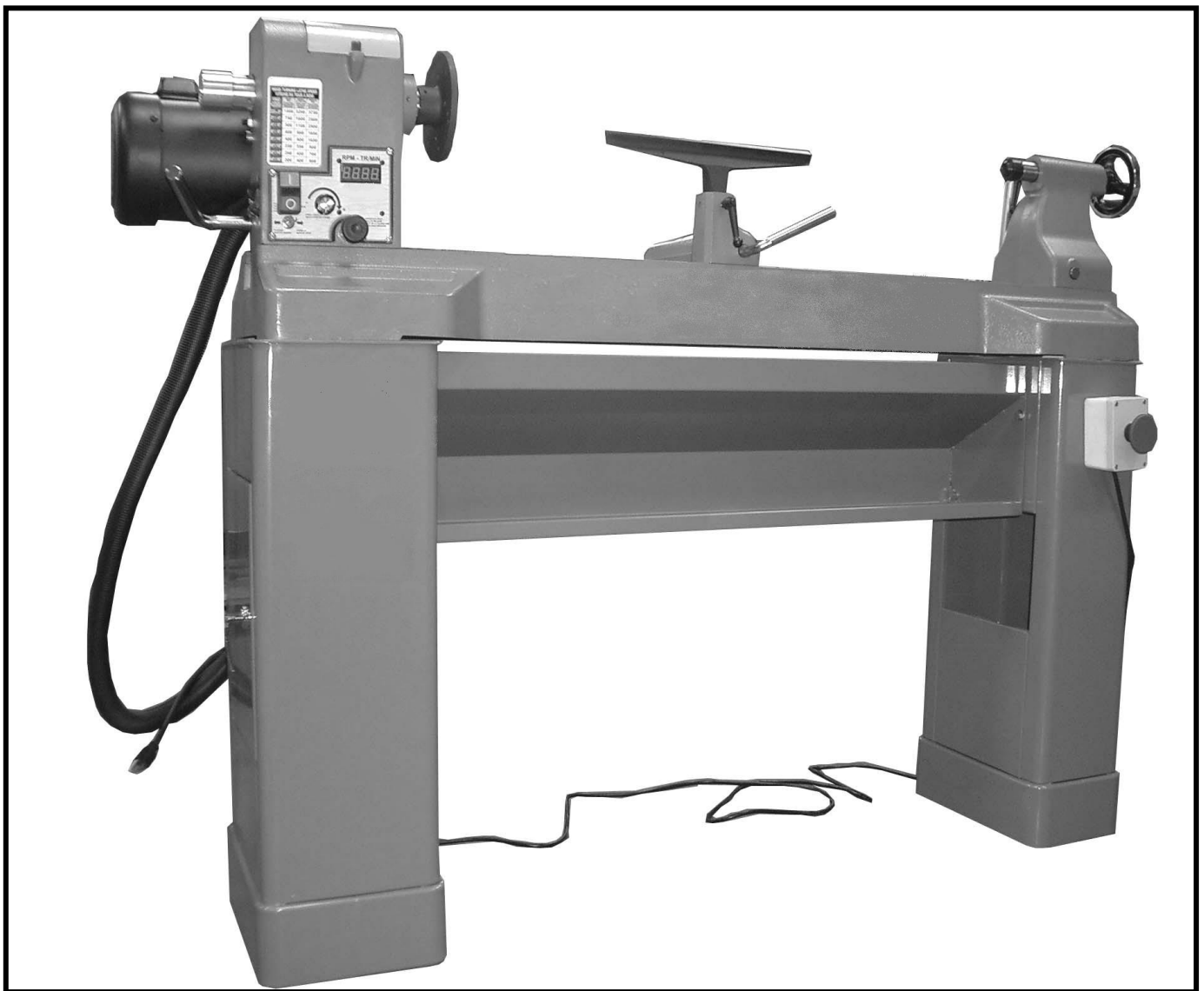


WOOD TURNING LATHE CT-25650

OPERATION MANUAL AND PARTS LIST



2005/12

SAFETY INSTRUCTIONS

- 1. ALWAYS KEEP THE GUARDS IN PLACE**, and in good working order.
- 2. REMOVE ADJUSTING KEYS AND WRENCHES.** Form the habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- 3. KEEP THE WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- 4. DON'T USE IN A DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep the work area well lit.
- 5. MAKE THE WORKSHOP CHILD-PROOF** with padlocks, master switches, or by removing starter keys.
- 6. DON'T FORCE THE TOOL.** It will do the job better and safer at the rate for which it was designed.
- 7. USE THE RIGHT TOOL.** Don't force the tool or attachment to do a job for which it is not designed.
- 8. WEAR PROPER APPAREL.** Don't wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 9. ALWAYS USE SAFETY GLASSES.** Also use a face or dust mask if the operation is dusty. Everyday eyeglasses only have impact-resistant lenses. They are NOT safety glasses.
- 10. SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate the tool.

SAFETY INSTRUCTIONS

- 11.DON'T OVER-REACH.** Keep proper footing and balance at all times.
- 12.MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 13.DISCONNECT POWER FROM TOOLS** before servicing and when changing accessories such as blades, bits, cutters, etc.
- 14.REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure the switch is in the off position before you plug in the machine.
- 15.USE RECOMMENDED ACCESSORIES.** Consult the equipment manufacturer's manual for recommended accessories. The use of improper accessories may cause injury.
- 16.NEVER STAND ON THE TOOL.** Serious injury could occur if the tool is tipped or if the cutting blade is unintentionally contacted.
- 17.CHECK DAMAGED PARTS.** Before further use of the tool, damaged parts should be carefully checked to determine that they will operate properly and perform their intended function. Check for alignment, binding or breakage of moving parts, or any other condition which could affect operations.
- 18.DIRECTION OF FEED.** Only feed work into a blade or cutter against the blade's rotation direction.
- 19.NEVER LEAVE THE TOOL UNATTENDED WHILE IT IS RUNNING.** Don't leave the tool until it comes to a complete stop.
- 20.KNOW YOUR POWER TOOL.** Read both the assembly and operation manual and get acquainted with maintenance and lubrication procedures. Never use accessories or attachments not recommended by the manufacturer as it may result in injury.

ADDITIONAL SAFETY RULES FOR WOOD LATHE

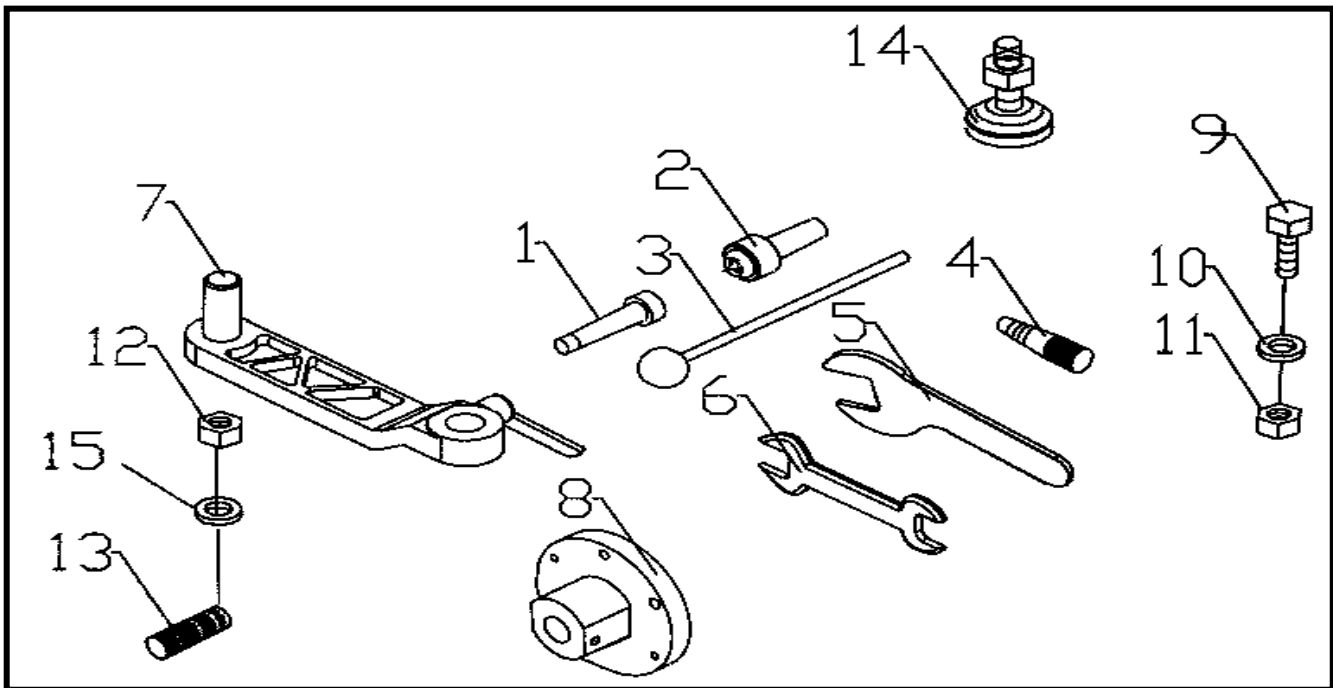
1. Make sure the workpiece is clamped securely between centers before starting the wood lathe.
2. Before machining the workpiece, make sure that the tailstock is locked securely without movement.
3. Do not attempt to measure the workpiece size while the machine is running.
4. Keep tool bit sharp at all times. Grind tool bit to the correct shape.
5. Do not remove any safety guard during operations. Turn the power off before removing any safety guard.
6. Wear proper apparel. Avoid loose clothing, gloves, neckties, rings, bracelets and jewelry which could get caught in moving parts.
7. Turn power off before servicing the machine.
8. Use only the correct specifications of center.
9. Make sure all switches are in OFF condition before connecting power wires.

NOTES

LOOSE PARTS BAG

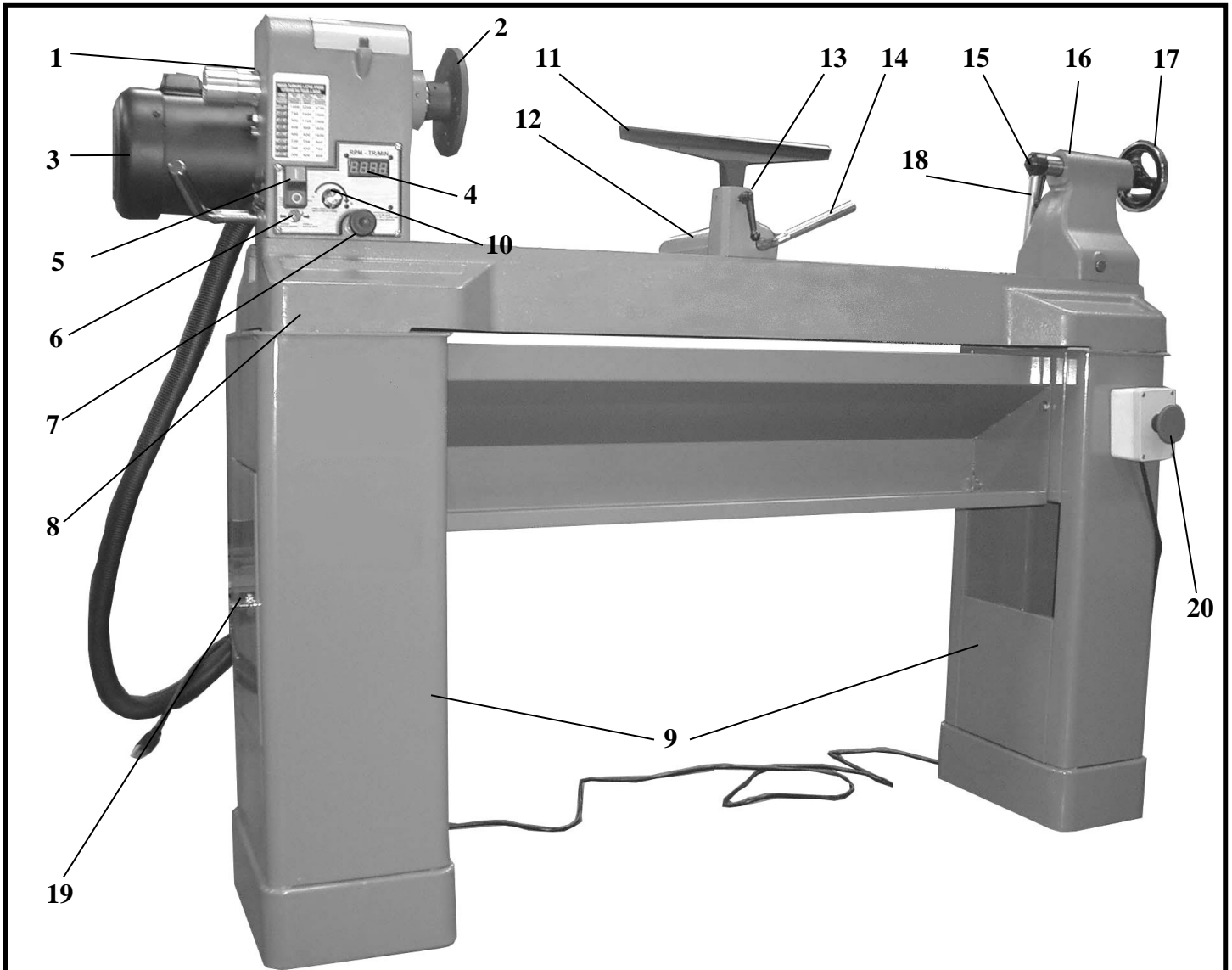
Remove the machine from the carton and ensure that all parts present and free from damage. If any parts are missing or damaged, contact your local distributor immediately. Do not attempt to assemble or operate the machine without all parts present and in working order.

1. Spindle center
2. Tailstock live center
3. Center knock-out rod
4. Indexing pin
5. Open end wrench
6. Open end wrench 12 mm
7. Tool rest support arm
8. 6" faceplate
9. Screws 5/16" -18UNCX 5/8" 6 PCS(FOR TOOL TRAY)
10. Washers 5/16" 12 PCS(FOR TOOL TRAY)
11. Nuts 5/16" 6 PCS(FOR TOOL TRAY)
12. Nut 3/8" 4PCS
13. Set Screw 3/8"-16UNCX1" 4 PCS
14. Foot pad 8PCS
15. Washers 3/8" 4 PCS



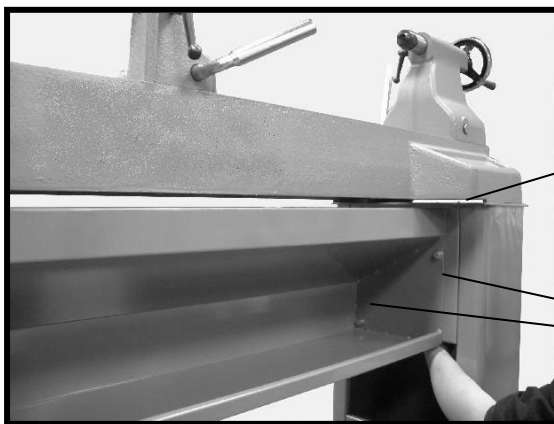
WOOD LATHE LEGEND

- | | |
|--|------------------------------|
| 1. Headstock | 11. Tool rest |
| 2. Face Plate | 12. Tool rest base |
| 3. Spindle motor | 13. Tool rest fix lever |
| 4. Spindle speed readout | 14. Tool rest base fix lever |
| 5. ON/OFF Switch | 15. Tailstock live center |
| 6. Spindle running direction change knob | 16. Tailstock |
| 7. Headstock indexing pin | 17. Tailstock hand wheel |
| 8. Bed | 18. Tailstock fix lever |
| 9. Stands | 19. Door |
| 10. Spindle speed regulation knob | 20. Emergency Stop Switch |



MOUNTING WOOD LATHE ON STAND

1. Have others nearby and ready to lend a hand, as help will be required for lifting the lathe, and for lining up and securing the bed to the stand.
2. Align the three holes in each end of the tool tray with the corresponding holes in the right and left stands.(Fig.1)
3. Secure the tool tray to the right and left stands using, at each end, three 5/16" bolts, washers and nuts.
4. Lift and set the lathe onto the stand and line up the holes at each end in the bed, with the holes on the top of the stand.(Fig.2)
5. Secure the bed to the stand by using the four 3/8" bolts (2 at each end) from the bed and through the corresponding holes in the stand.(Fig.3) Tighten the bolts down by using the four nuts.(Fig.1)



Tighten the bolts down by using the four nuts.

Three Holes

Fig.1



Fig.2

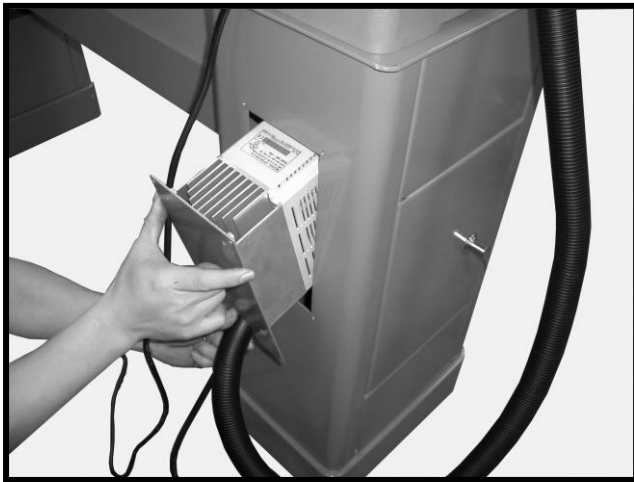


Fig.3

MOUNTING FREQUENCY INVERTER

The frequency inverter is used to control the spindle speed and provides a variable speed change.

The frequency inverter should be mounted in left stand of the wood lathe. Align the 4 holes on the frequency inverter with those on the left stand. Tighten the frequency inverter with round head screws 3/16"-24UNC 1/4".



Step One

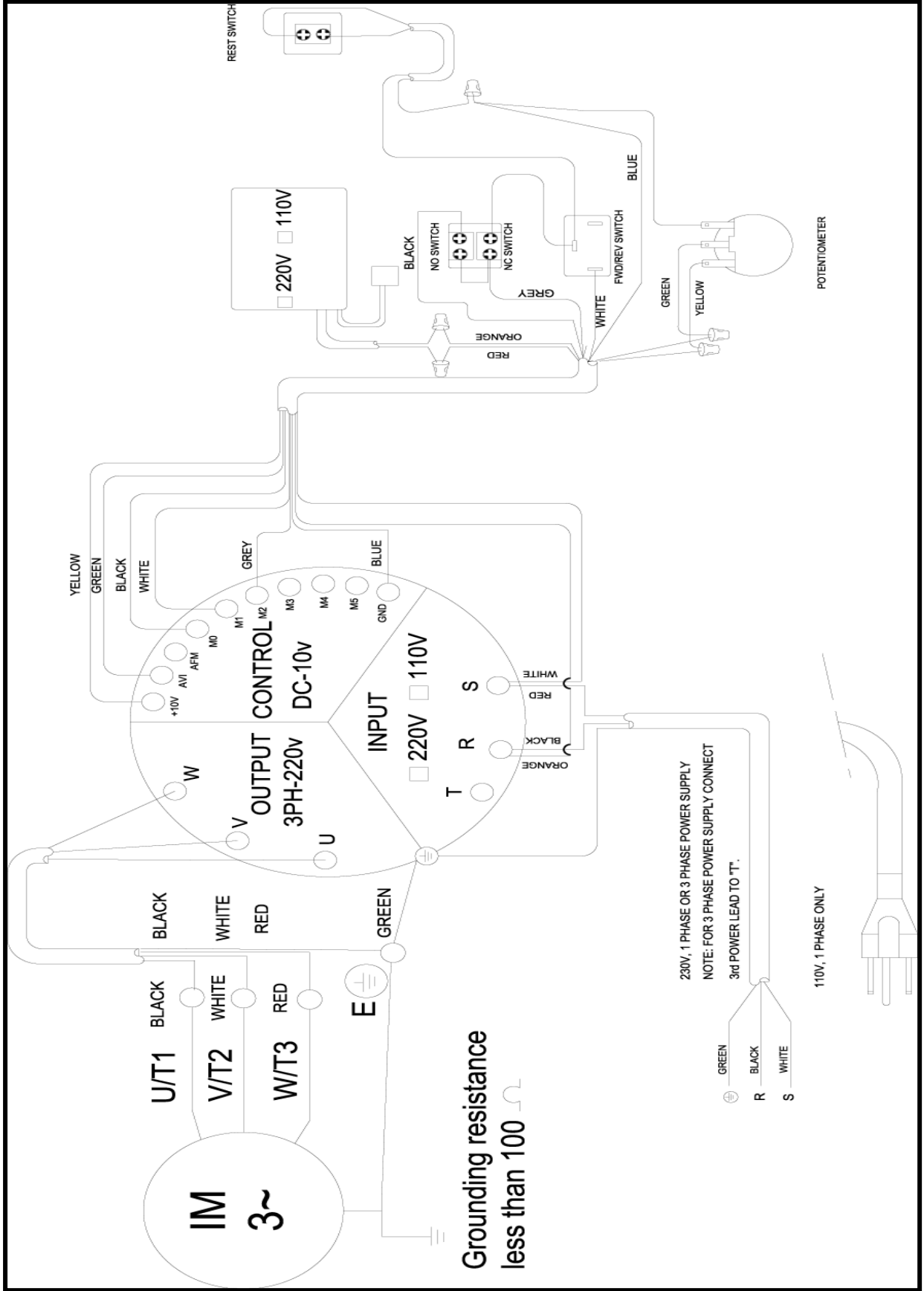


Step Two



Step Three

ELECTRIC WIRING DIAGRAM



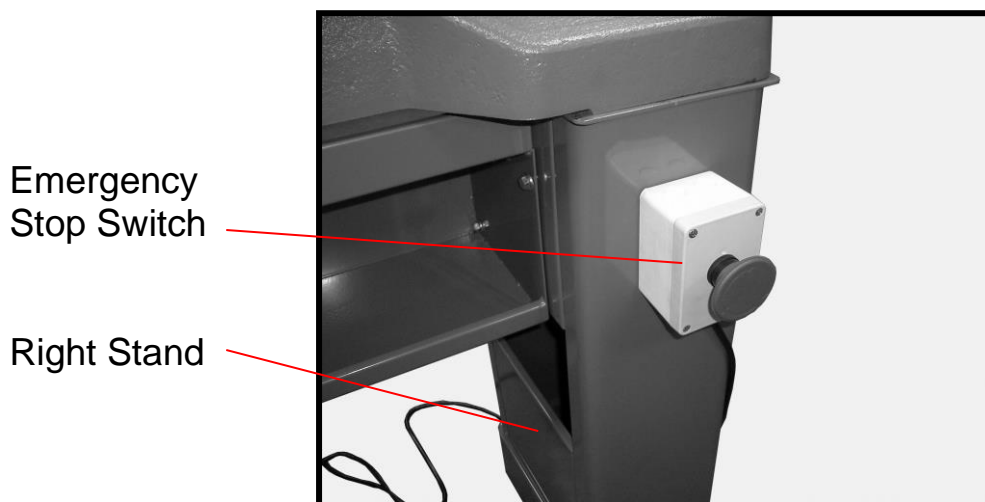
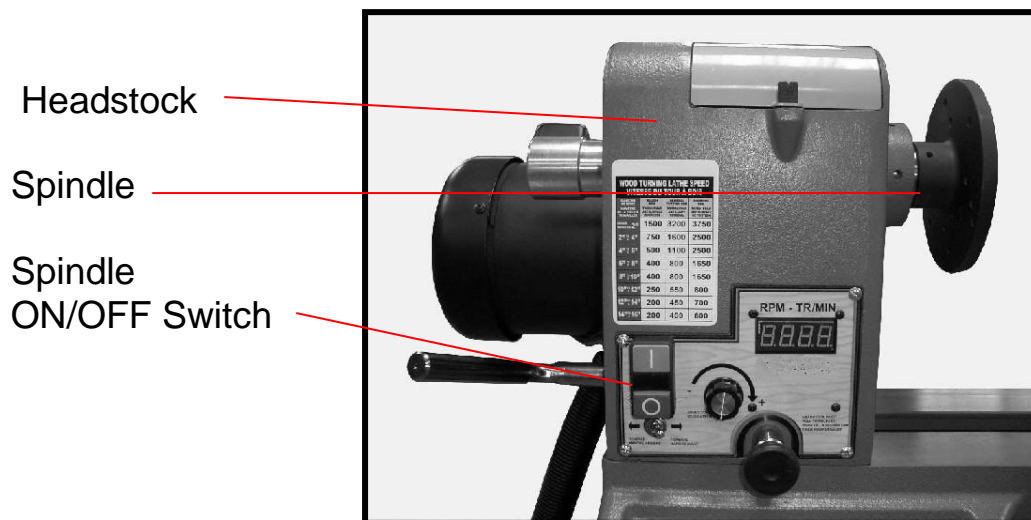
STARTING AND STOPPING SPINDLE

The spindles ON and OFF switches are located on the front of the headstock. To start the spindle running, press the green (ON) switch.

To stop the spindle running, press the red (OFF) switch.

An additional emergency stop switch is supplied with machine. After pressing the emergency stop switch, you have to press the green ON switch to re-start spindle running.

To stop the spindle, press either the red OFF switch or the emergency stop switch.



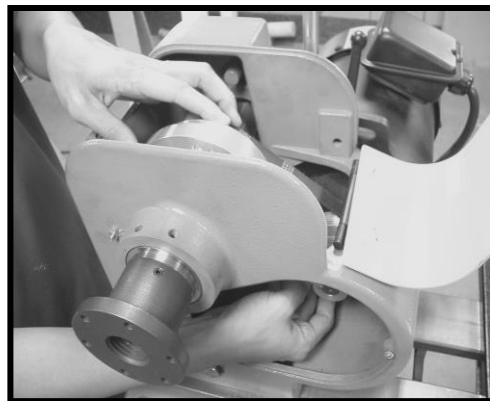
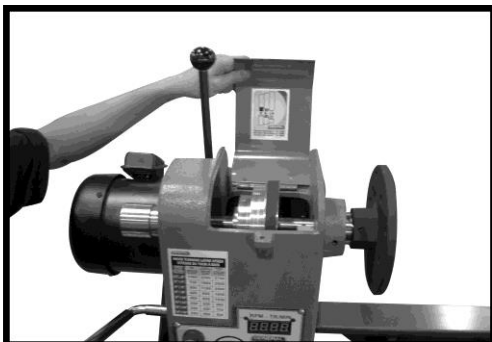
CHANGING SPINDLE SPEED RANGE

The spindle provides 3 ranges of speed – high, medium and low. The high speed range is from 0 to 3,750 rpm. Medium speed range is from 0 to 2,000 rpm. Low speed range is from 0 to 1,000 rpm. Spindle speed ranges are shown on the speed chart attached to the inside of the headstock cover.

Changing the spindle speed range is made by positioning the belt on proper pulleys as follows:

1. Disconnect the machine from the power source.
2. Loosen the headstock cover lock knob. Then, open the cover.
3. Loosen the lock lever that tightens the motor base.
4. Loosen the belt tension by pulling backward the belt tension lever. Positioning the belt on the proper pulleys according to the speed chart indication.
5. Pushing forward the belt tension lever for tightening the belt tension. The motor weight provides a tightening effect to belt tension.
6. Tighten the motor base lock lever securely after the spindle speed range has been changed.
7. Close and tighten the headstock cover.

Caution: If you feel difficult to change belt, please open the side plate.

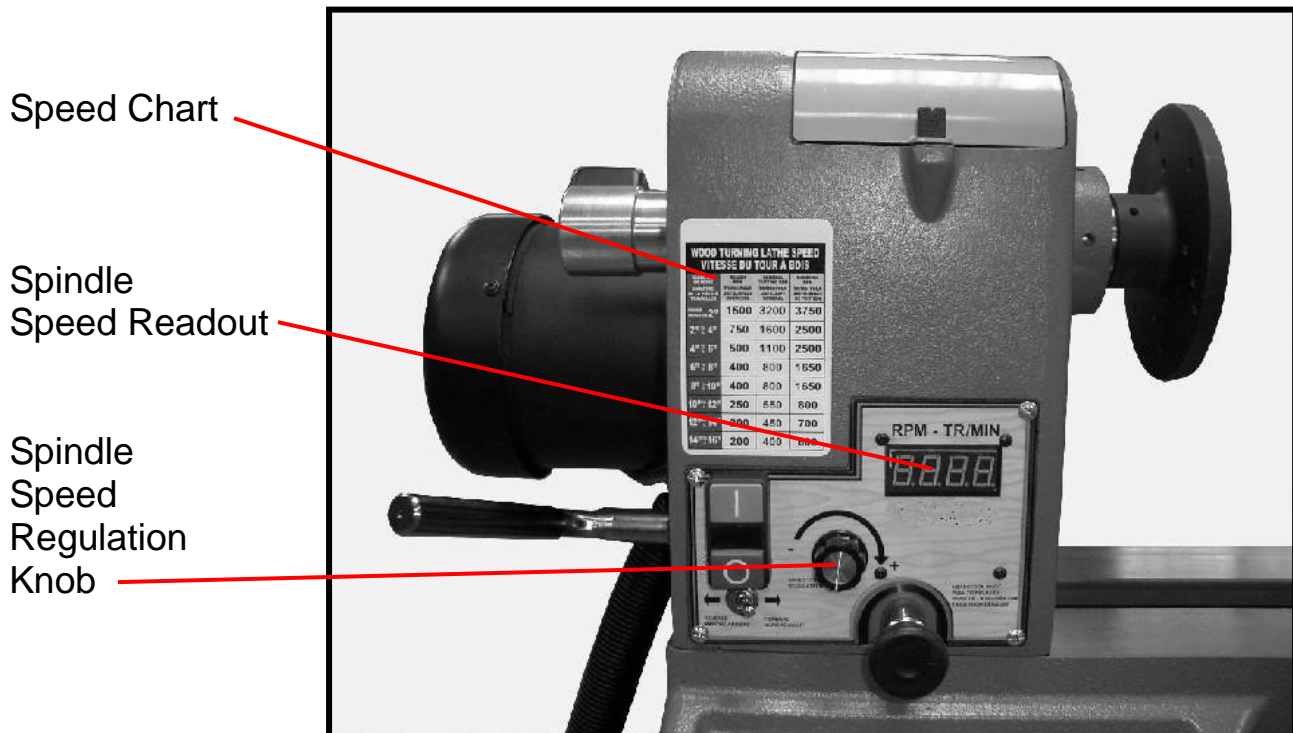


CHANGING SPINDLE SPEED

The spindle speed is controlled by a frequency inverter which provides variable speed change. The spindle provides 3 ranges of speed—high, medium and low. The range of speed is shown on the speed chart attached to the headstock.

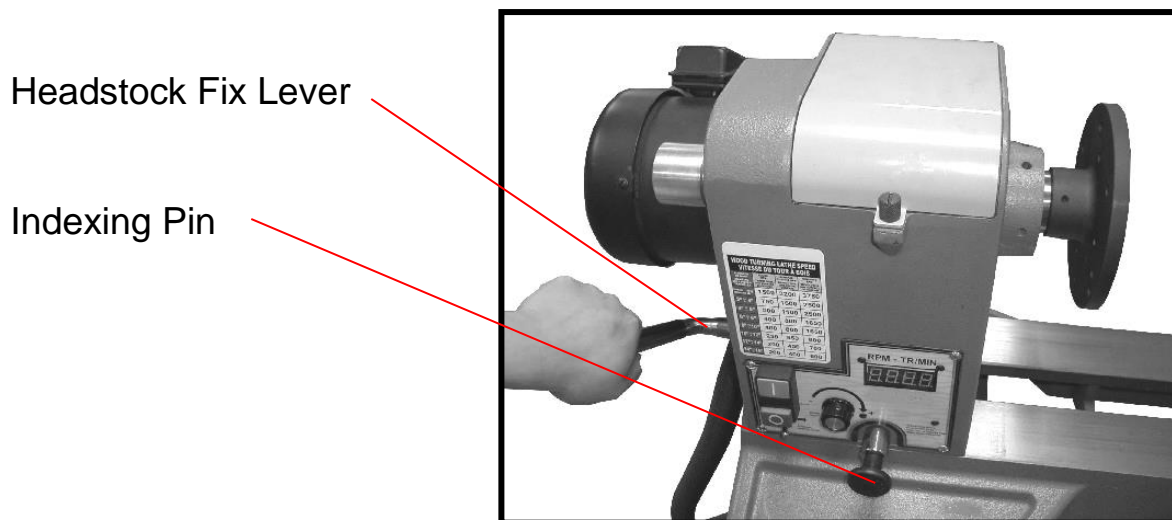
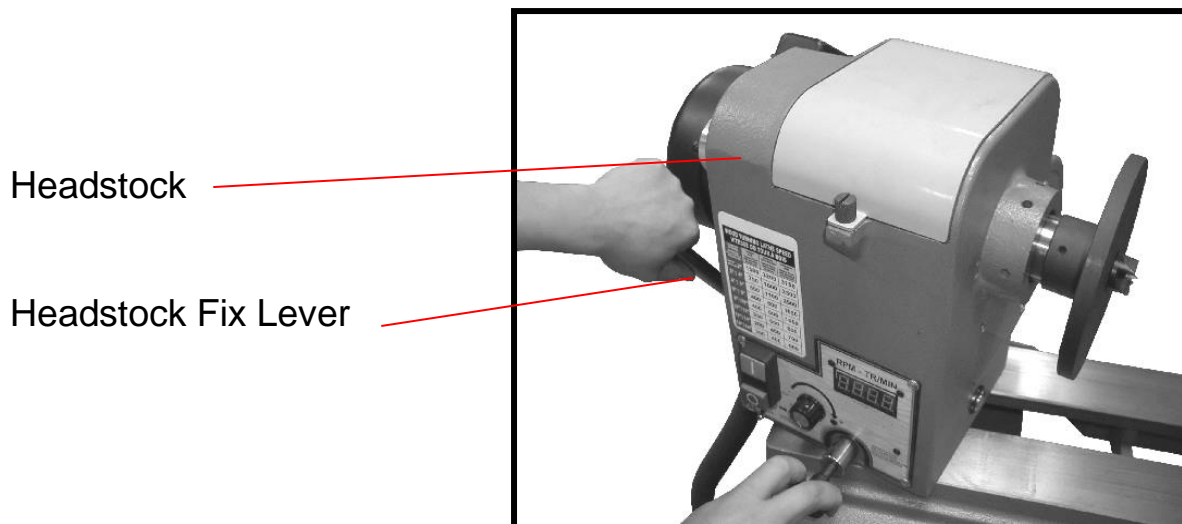
Change the spindle speed as follows:

1. Check the present spindle speed range.
2. Start the spindle running.
3. Turn the speed regulation knob to change speed. Turn it clockwise (toward + direction) for increasing speed and counter-clockwise (toward - direction) for decreasing speed.
4. Change spindle speed only when the spindle is running.
5. The spindle speed is displayed on the spindle speed readout.



HEADSTOCK INDEXING

1. The headstock can be swiveled to desired angles.
2. To rotate the headstock, loosen the headstock fix lever which is located at the left side of the headstock. Pull the indexing pin out to release the headstock.
3. Rotate the headstock to your desired angle. There are 6 stops for quick indexing of the headstock at 0°, 45°, 90°, 135°, 180° and 270°.
4. Push in the indexing pin until it engages with the headstock.
5. Tighten the headstock fix lever when it is positioned properly.



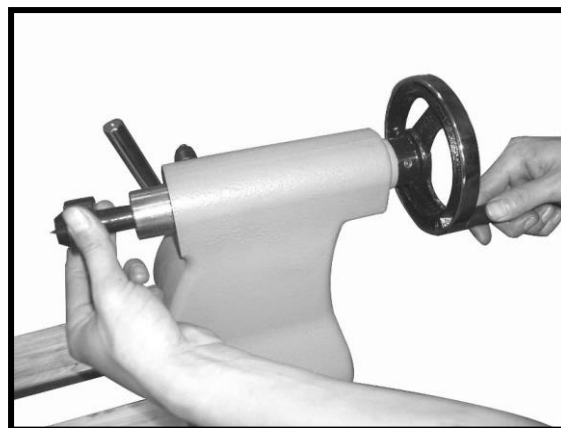
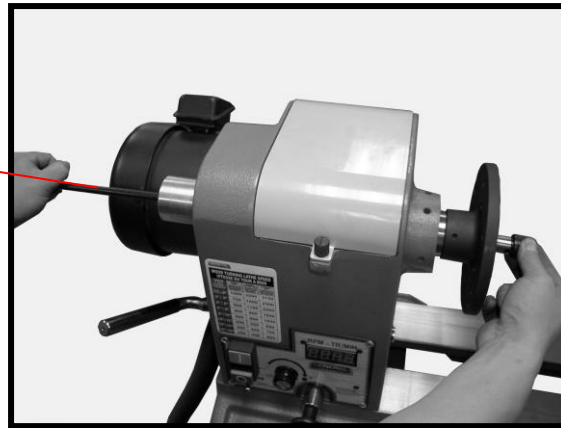
CAUTION

When indexing the headstock at 270°, care should be taken to avoid the headstock interfering with the power wire.

MOUNTING AND REMOVING HEADSTOCK CENTER AND TAILSTOCK LIVE CENTER

1. Disconnect the machine from the power source before mounting or removing the headstock and tailstock center.
2. Fit the spur center into the spindle taper hole or fit the tailstock center into the tailstock quill taper hole.
3. Clean the center and spindle hole before fitting.
4. To remove the spur center, insert a steel rod through the spindle and knock out the center. At this time, hold the spur center by hand to prevent it dropping down.
5. To remove the tailstock center from the quill, turn the tailstock hand wheel until the center is released.
6. Loosen the quill fix lever before moving the quill in or out. Tighten the fix lever when the center is fitted to hold the workpiece.

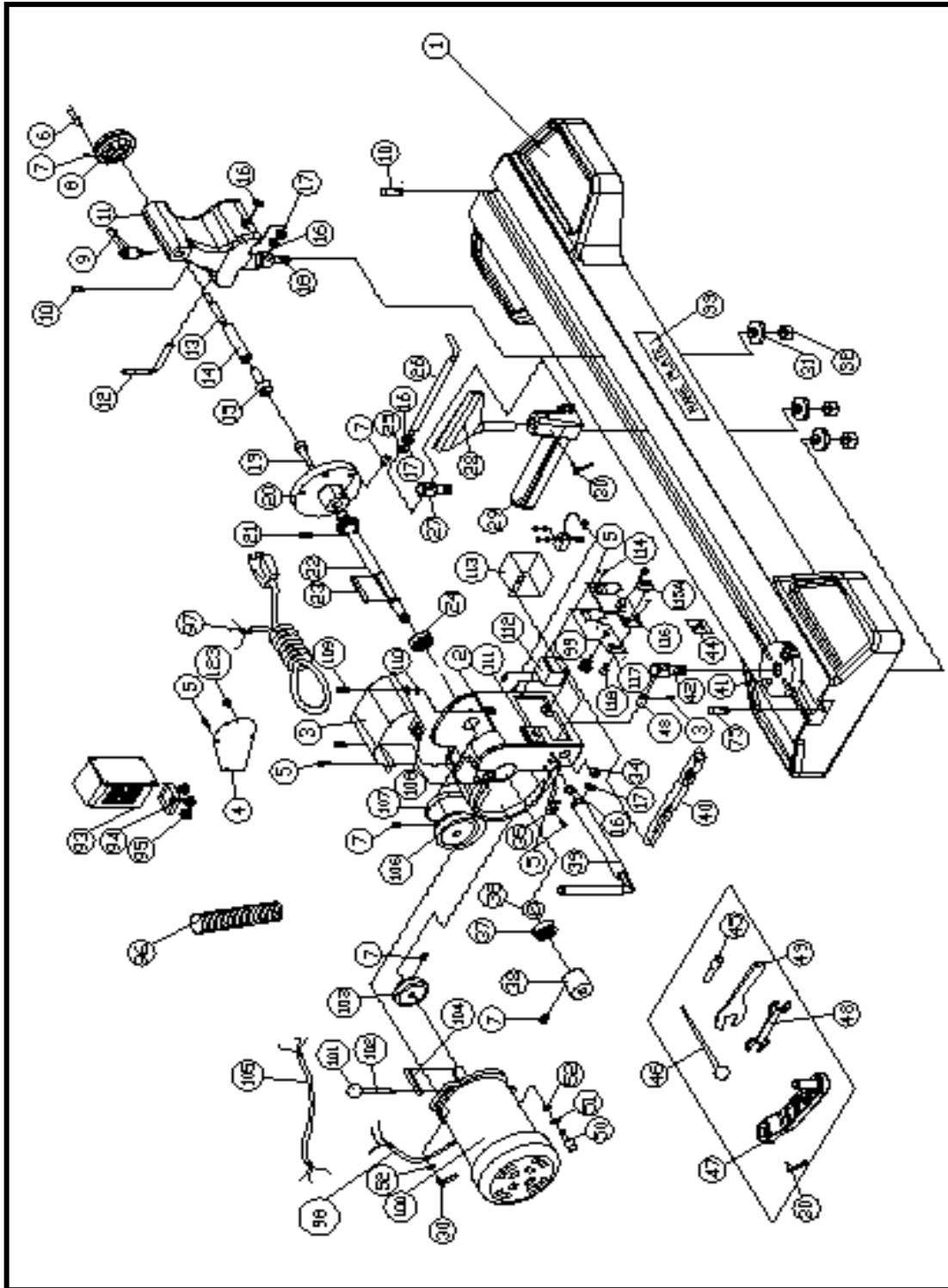
STEEL ROD



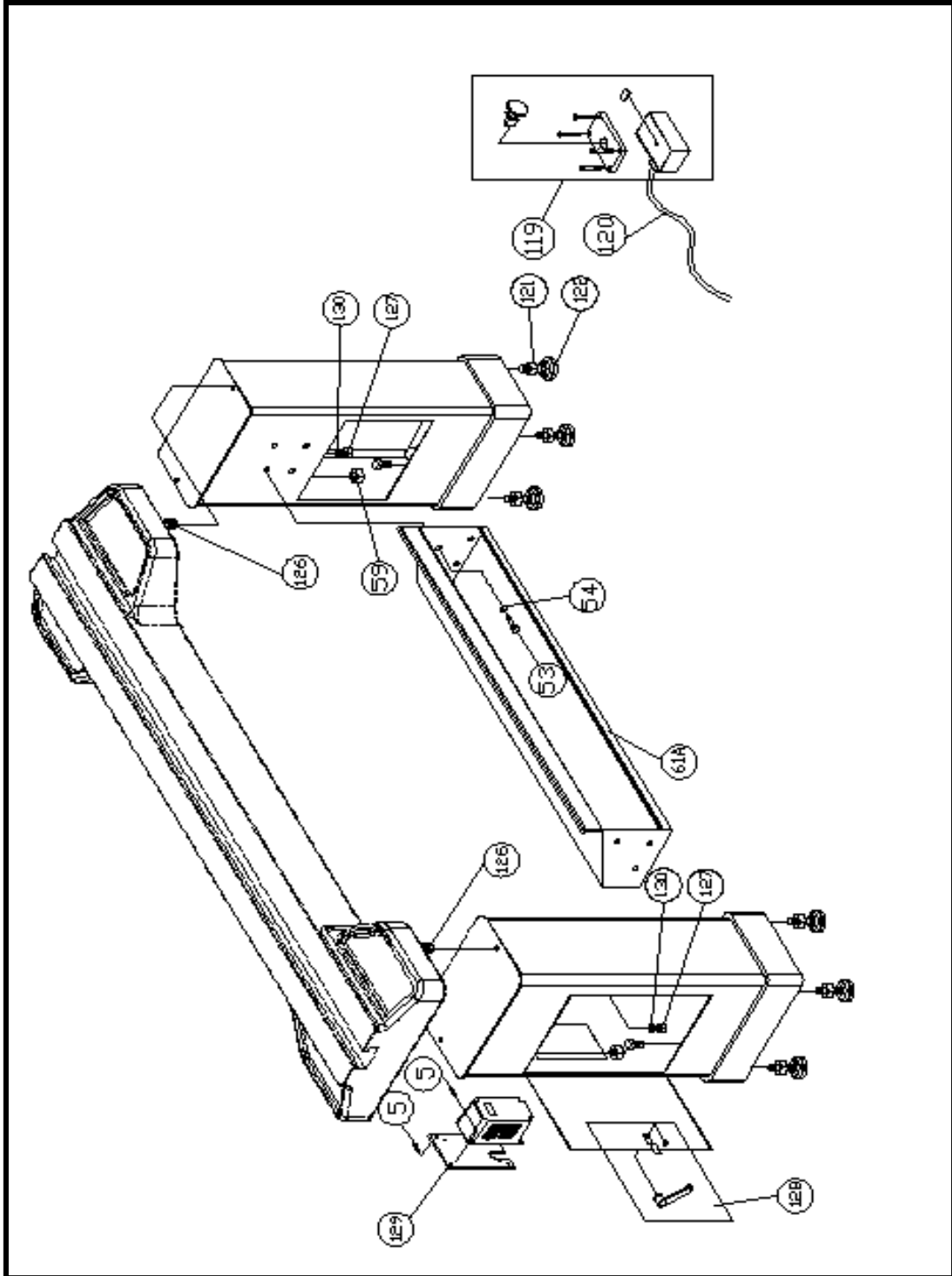
WARNING

The headstock & tailstock center are very sharp. Care should be taken when mounting or removing it.

PARTS LIST DIAGRAM



PARTS LIST DIAGRAM <STAND>



PARTS LIST

PART NO.	DESCRIPTION	SPECIFICATION	QTY
650-1	Bed	58"	1
650-2	Headstock Body	16"	1
650-3	Headstock Cover		1
650-4	Headstock Side Cover		1
650-5	Round Cross Head Screw	#10-24-UNC	17
650-6	Handle		1
650-7	Set Screw	1/4"*3/8"	12
650-8	Tailstock Hand wheel	5"	1
650-9	Handle	5/16"	1
650-10	Stop Rod	3/8"	3
650-11	Tailstock Body	16"	1
650-12	Tailstock Eccentric Shaft		1
650-13	Tailstock Screw	3/4"	1
650-14	Tailstock Quill	35	1
650-15	Tailstock Center	MT2	1
650-16	C-Ring	19	4
650-17	Wave Washer	3/4"	4
650-18	Bolt		1
650-19	Spindle Center	MT2	1
650-20	Face Plate	6"	1
650-21	Round Cross Head Screw	#10-24-1/4"	4
650-22	Spindle	1-1/4-8TPI	1
650-23	Key	4*4*80	1
650-24	Bearing	6205	1
650-25	C-Ring	S-18	1
650-26	Tool Rest Eccentric Shaft		1
650-27	Bolt		1
650-28	Tool Rest		1
650-29	Tool Rest Base		1
650-30	Handle	3/8" * 1"	3
650-31	Fixing Piece		3
650-32	Nut	3/4"	3
650-33	Name plate		1
650-34	Cord Protector	22	2
650-35	Power Wire Fixing Piece		1
650-36	Wave Washer	49	1
650-37	Bearing	6304	1
650-38	Headstock Hand Wheel		1
650-39	Spindle Eccentric Shaft		1
650-40	Positioning Set		1
650-41	Headstock Swiveling Base		1
650-42	Bolt		1
650-43	Bushing		1
650-44	ID label		1
650-45	Lock Pin		1
650-46	Tapered Shaft		1
650-47	Swiveling Tool Rest		1
650-48	Open End Wrench	12 & 14	1
650-49	Wrench	2"	1
650-50	Hex Socket Cap Screw	3/8" -1 1-1/2"	2
650-51	Spring Washer	3/8"	2
650-52	Flat Washer	3/8"	6
650-53	Hexagonal Head Screw	5/16"-1-1/4"	6
650-54	Flat Washer	5/16"	12
650-58	Warning label		1
650-59	Nut	5/16"	6
650-61A	Tool Tray		1

PARTS LIST

PART NO.	DESCRIPTION	SPECIFICATION	QTY
650-93	Frequency Inverter	110V	1
650-93B	Frequency Inverter	220V	1
650-94	Junction Box		1
650-95	Wire Clamp		3
650-96	Hose	1"	1
650-97	Power Wire		1
650-98	Motor Wire		1
650-99	Speed Control Set (VR)		1
650-100	Motor	1.5HP 110V	1
650-100B	Motor	1.5HP 220V	1
650-101	Knob	3/8"	1
650-102	Motor Handle	3/8"	1
650-103	Motor Pulley		1
650-104	Key	5* 5* 40	1
650-105	Signal Wire		1
650-106	Spindle Pulley		1
650-107	Belt	210J	1
650-108	Speed Indication Plate		1
650-109	Stud	1/4" *20UNC	1
650-110	O-Ring		1
650-111	Cutting Instruction Plate		1
650-112	Digital Readout RPM	110V	1
650-112B	Digital Readout RPM	220V	1
650-113	Bracket		1
650-114	Tapping Screw	M3*10	4
650-115A	On/Off/Switch		1
650-116	Control Panel Acrylic		1
650-117	Control Panel		1
650-118	Fwd/Rev Switch		1
650-119	Switch with Magnet		1
650-120	Control Wire		1
650-121	Nut		8
650-122	Foot pad		4
650-123	Stud	10-24-UNC	1
650-126	Set Screw	3/8"	4
650-127	Nut	3/8"	4
650-128	Handle Lock		1
650-129	Frequency Inverter Plate		1
650-130	Washer	3/8"	4

NOTES