Date Purchased: _____

This Oneway product is backed by a warranty period of 5 years from the date of purchase. Non-manufactured parts (i.e. Drive, Motor, Bearings etc) are not covered under this warranty; please refer to the relevant Warranty information provided with the lathe.

Oneway hereby agrees to repair or replace, any defects due to faulty material or workmanship, provided that:

1. Oneway has reasonable opportunity to verify the alleged defect by inspection.

   Oneway reserves the right to charge customers for replacement parts until the defect is verified whereupon a full refund will be issued.

2. The warranty period has not elapsed. Proof of purchase date (sales receipt etc.) is required prior to any repair taking place.

3. The product has not been altered or modified in any way.

4. The product has not been subjected to misuse, abuse, negligence, or was not used in a “normal” manner.

5. All transportation costs incurred in returning the product to Oneway Manufacturing is pre-paid by the customer.

6. Defective parts will be returned using the Canadian or U.S Postal Service (ground) or relevant Postal Service (surface) if overseas, packaged appropriately, and labeled “Defective Goods - Returning to Manufacturer”.

   Important: *Please call us prior to returning the defective parts.*

This warranty does not cover any costs or damages arising directly or indirectly from the operation of this product.

No other guarantee, written or verbal, is authorized by Oneway Manufacturing.

Our policy is one of continuous improvement. We therefore reserve the right to change the specification and/or design without notice.

ONEWAY MANUFACTURING

A Revolution in Lathes!

291 Griffith Road, Unit A, Stratford, ON,
N5A 2P6, Canada
Phone: 1-519-271-7611
Fax: 1-519-271-8892

1-800-565-7288
www.oneway.ca

Owner’s Manual

1224 Lathe

POWER AND PRECISION FOR TODAY’S WOODTURNER

Included with your Lathe:

- **#2 MT Safe Driver**
- **#2 MT Live Center**
- **Knock Out Rod**
- **3” Faceplate**
- **14” Stainless Steel Toolrest**
- **Open Ended Wrench**
- **Levelling Pads**
- **Knock Out Rod**
- **6mm & 8mm Hex Keys**

Customer Name

Model Number

Serial Number

Manufactured Date (MM/DD/YY)

Horsepower

1½ HP ☐ 2 HP ☐ 3 HP ☐

	Make	Model	Serial Number
Motor:	_____	_____	_____
Drive:	_____	_____	_____

Electrics:

Voltage: 220 Volts, Phase 1, 50 or 60 Hertz (auto-sensing)
Wiring Method: Three Wire Control

Belt Length & Width:

☐ 20” Swing PJ 1270 / 500J
☐ 24” Swing PJ 1372 / 540J

Bearings:

Front 5209 LLBC3 / 2A
Rear 6008 2NKE / C3

Headstock / Tailstock Alignment:

Height - maximum tolerance 0.005 TIR
Actual Difference _____ TIR

Side to Side Tolerance 0.010 TIR
Actual Difference _____ TIR

Options

- Small Extension Bed (17”) ☐
- Large Outboard Attachment ☐
- RFI Filter ☐
- Long Bed Extension ☐
- Extra Banjo ☐
- Extra Toolrest ☐
- Remote Start / Stop ☐
- Breaking Resistor ☐
- 96 Position Indexing ☐
- Please Specify: Other ☐

1224 Lathe

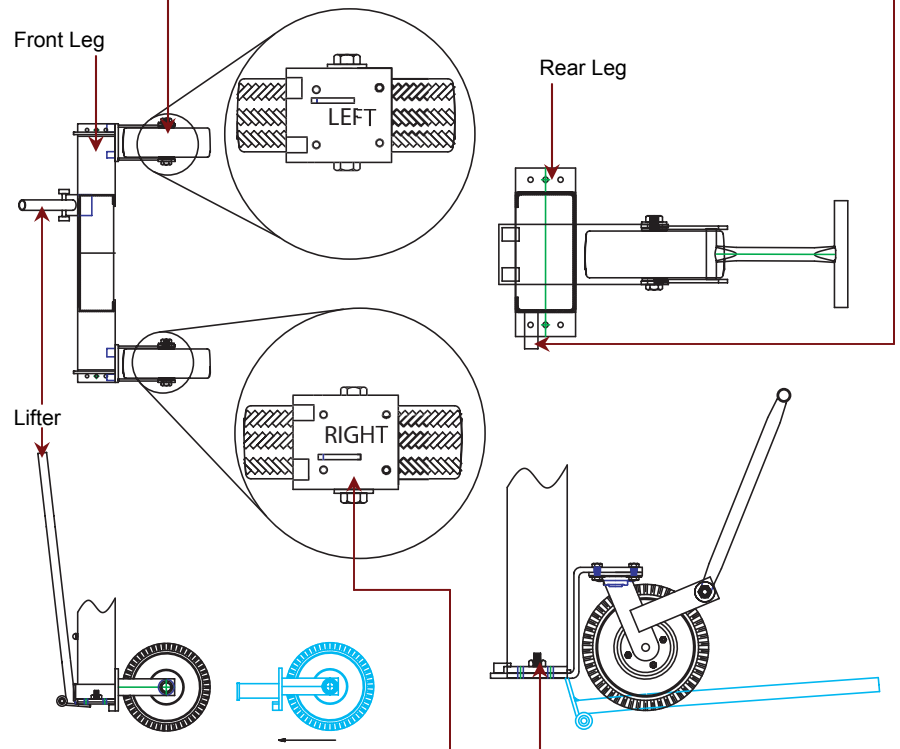
Wheel Set Installation Instructions

1. Install Left Wheel

Lift the lathe corner using the Lifter (supplied), and install the left wheel

3. Shim the Rear Leg

Lift at A (as shown) and insert a 3/8" or 1/2" shim at B (this allows lifter entry



2. Install Right Wheel

Lift the opposite corner and install the right wheel

4. Install Rear Leg

Insert the Lifter at B and lift the rear leg. Install the rear wheel as shown

Congratulations on your purchase of a ONEWAY 1224 Lathe.
This manual describes general use and features of the ONEWAY 1224 Lathe. It is not meant to be a woodturning instruction book. If you are new to turning, we recommend seeking out a qualified instructor in your area. There are many national and local woodturning organizations that can recommend instructors. If you are unable to take lessons, there are many excellent books and videos available. Proper instruction will ensure that you work safely and that you can

Lathe Specifications

Distance between Centers	24"
Overall Length	39.2"
Swing over Bed Swing over Banjo	12 1/2" 9"
Spindle Taper	#2 Morse Taper
Tailstock Taper	#2 Morse Taper
Weight	300 lbs
Spindle Thread—Inboard	1" - 8 TPI RH
Spindle Thread—Outboard	3/4" - 16 TPI RH
Standard Spindle Height	44 1/2" (on bench)

Bedways and ribs are welded to a 4-1/2 inch diameter * 1/4 inch wall tube. The assembly is stress relieved and precision machined. Bedways are offset so chips and debris fall straight thru without sacrificing rigidity.
Almost perfect torsional rigidity is achieved - many times more than twin tube or cast iron bed designs.

The Headstock

- Features a four bearing spindle: At the front are two deep groove ball bearings custom fitted with ground spacers, and locked to the shaft with a lock nut in the housing. This minimizes radial and axial play of the spindle. The rear bearings float axially to allow for heat expansion. Bearings are no maintenance greased for life.
- The spindle is 1-5/8" at maximum diameter and drilled thru 3/8" with number 2 morse taper at the inboard end. It is made from high strength alloy steel, hardened and ground to precision tolerance of ±0.0003 inches.
- A special self supporting wrench is used to remove accessories from the spindle such as faceplates and chucks.
- 24 position indexing is standard.

The Spindle

- The spindle is 1" - 8 TPI with a groove machined for a lock screw. This design contributes to the safety of this machine, as it reduces the possibility of chucks or faceplates accidentally unscrewing from the spindle, especially when the machine is used in reverse. It is also safer when sanding and braking.

PAINTED BOWL by David Loewy

1224 Lathe Accessories Available

Lathe Bed Extension

A 24" extension which bolts onto the end of the 1224 is available which increases the distance between centres from 24" to 48 inches. Because of the solid construction of the model 1224 Lathe, using this extension easily allows turning pieces this extended length. The end of this extension is equipped to handle a leg, but does not come with one. After testing this extension, we feel that one extension bolted to the end of the 1224 Lathe, in most applications will not require a support leg.

1224 Lathe Bed Extension—Part #M0221

Spindle Adaptors

Two spindle adaptors are available for those people who already have a large sized ONEWAY Lathe. These adaptors allow the use of accessories which are threaded M33 * 3.5 on both the inboard and outboard side of the 1224 Lathe

1" - 8 to M33 * 3.5—Part No. 2961
3/4 - 16 to M33 * 3.5—Part No. 2962

Curved Toolrests

Similar to the toolrests for the large lathes, we have two configurations of curved toolrest specifically for the 1224

The General Purpose toolrest (post is on the end), which is for the inside of bowls and can also be used for the outside of bowls (Part #3301).

The other is an exterior toolrest (post is in the middle) which is for the outside of bowls only. (Part #3302)

General Purpose Toolrest Part #3301

Exterior Curved Toolrest Part #3302

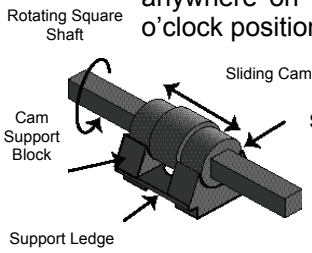
The BANJO/TOOLREST BASE is ONEWAY's own proven design that assures even, powerful locking anywhere on the bed (patented feature). The sliding cam is supported by a cam support block which rests on a ledge machined in the toolrest base. To ensure continuing smooth operation, lubricate the mechanism whenever it seems to be getting sticky. The banjo handle will clamp either to the left or right. Generally the handle is adjusted so that when it is clamped, the handle is clear of the bed. This allows the banjo to be clamped in all positions over the bed. The clamp handle position can be adjusted via the Nylock Nut, underneath the banjo.

How do I adjust the Toolrest clamp lever?

The toolrest clamp lever can be adjusted to clamp in any position. To change the position of this lever, unscrew the four screws that hold the clamp nut in place, rotate it to the desired position and re-fasten the nut with the screws. Note that there are eight holes in the clamp nut, allowing adjustments of 1/8 rotational increments. The handle clamp position is an individual preference, but the 4 O'clock position is a good place to start.

What is a Sliding Cam Assembly

This assembly consists of: a rotating square shaft, a short sliding cam and a support block for the sliding cam. The square shaft rotates the sliding cam. The cam is supported on a cam support block which in turn is supported on a ledge machined in the tool rest base. The block moves with the sliding cam and supports the shaft. Deflection of the cam shaft is eliminated and there is no longer a clamping difference anywhere on the lathe bed. Unclamp is always at the 12 o'clock position and clamping may be adjusted to be repeatable anywhere between 10 & 6 o'clock with RH and LH clamping always at the same angle.

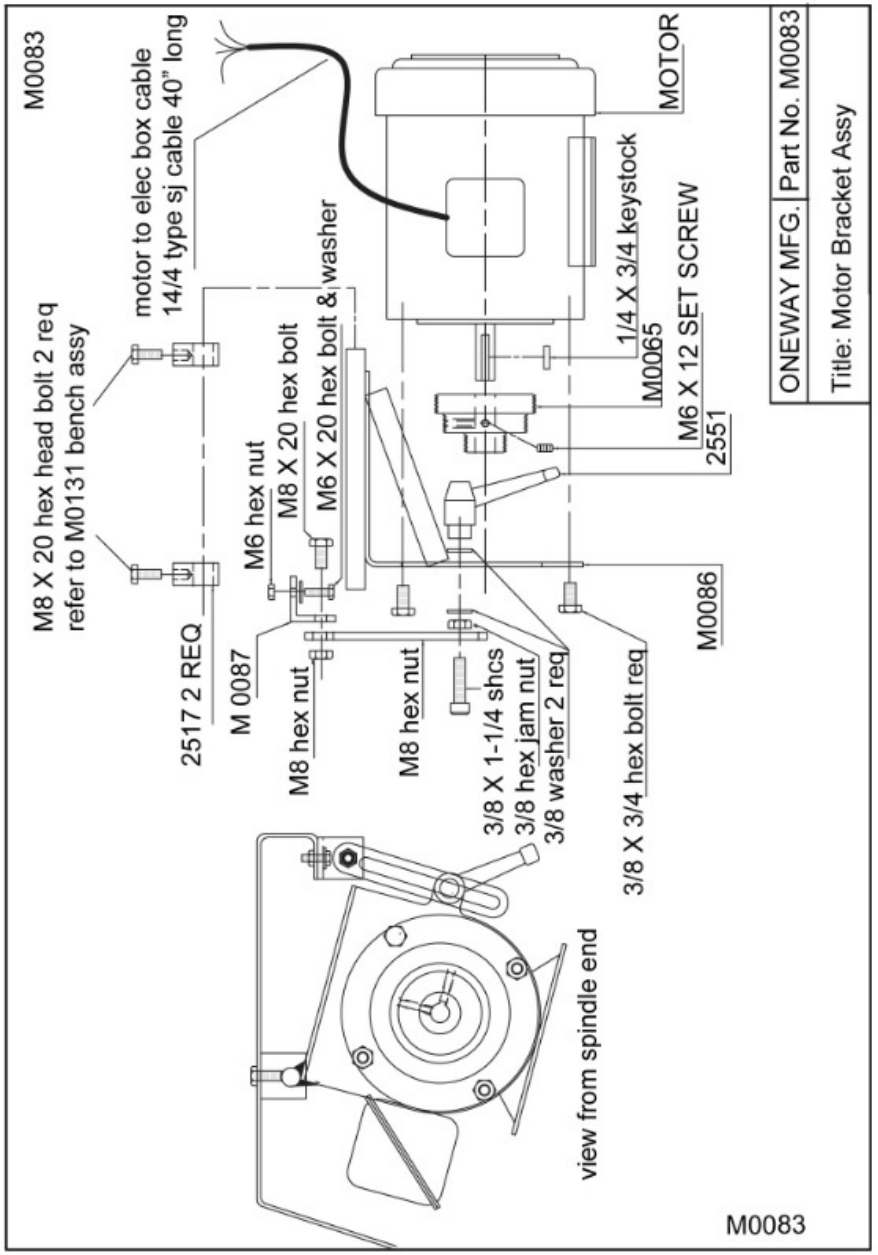


There are four spindle bearings in the headstock. These bearings are sealed and lubricated from the factory and should never need adjustment or lubrication. The bearings and the spindle in your lathe are designed to take normal woodturning forces for a long time. The best way to ensure long bearing life is to never hammer against the spindle. Due to the size and the preload on the bearings the lathe may run quite warm when it is new. As the bearings break in they will run cooler but will still get warm. Each lathe is run in at the factory and checked for excess temperatures, but **it is a good idea to keep the speed below 2000 RPMs for the first 30 hours of operation**. This allows excess grease in the bearings to escape and for the seals to break in. When replacing the bearings it is best to replace the front bearings with a matched set from ONEWAY Manufacturing. The rear bearings can be replaced by any equivalent bearing.

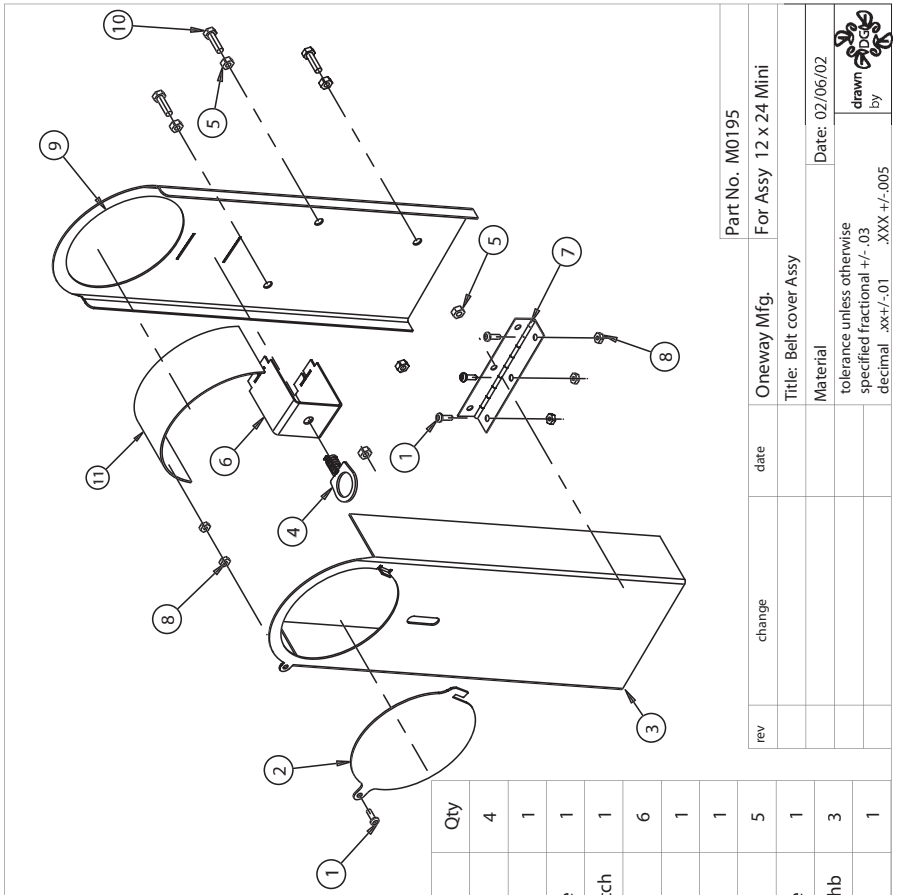
Replacing the Bearings

To replace the bearings you must remove the spindle. The first step is to take the belt off the motor pulley. Remove the nut on the back side of the spindle and slide off the pulley. Remove the six bolts in the spindle nose cap. Grab the nose cap and the entire spindle assembly should slide out. If it is tight, take two of the bolts you just removed and put them into the two tapped holes in the nose cap. Tighten them alternately and this will jack out the spindle. If you do not have a proper set of bearing tools, it is a good idea to send the spindle back to ONEWAY to prevent damage to the spindle and to the new bearings.

PART #M0083 - Motor Mount Assembly



Part # M0195—Belt Cover Assembly



Part No. M0195
For Assy 12 x 24 Mini
Oneway Mfg.
Title: Belt cover Assy
Material
Date: 02/06/02
tolerance unless otherwise specified fractional +/- .03
decimal .xx+/-.01 .XXX +/-.005
drawn by DGC

rev	change	date

M0195

Item	File Name	Title	Qty
1	8-32 x .50.par	8-32 x .5	4
2	M0197.psm	Plate	1
3	M0193.psm	Back Plate	1
4	Latch.par	Spring Latch	1
5	M6 Nut.par	M6 Nut	6
6	M0191.psm	Bracket	1
7	M0196.par	Hinge	1
8	8-32 Nut.par	8-32 Nut	5
9	M0192.psm	Back Plate	1
10	M6 x 20.par	M6 x 20 hhb	3
11	M0194.par	Lid	1

The tailstock on the ONEWAY 1224 is precision machined with a number two morse taper which allows the use of stronger live centers and larger drills. The lead screw is a 3/4" diameter 6 pitch acme thread and the barrel has a 3" bearing length. A 4” handwheel and the high lead on this screw allows rapid in and out feeds for drilling.

The quill is 1-1/8" diameter with 3" travel. The quill lock is the knurled brass knob located on the top of the tailstock. It should be snugged up when using a live centre. The lock does not have to be tightened excessively. This lock does not stop the quill from backing off, that is done by the feed screw mechanism. The lock removes any play between the quill and the bore, to help reduce vibration when working between centers.

The super rigid tailstock clamp is designed so that no flexing will occur under clamp pressure. This will ensure that the clamp will hold firmly while requiring no adjustment for the life of the lathe, and will retain the ease of movement of the tailstock along the bed.

The Morse Taper in the tailstock is greatly affected by how clean the taper is. Even a small amount of dust, or oil, will significantly reduce the drive force that can be exerted by the tailstock before accessories will spin in the taper. Always wipe any accessory and the taper with a clean rag before putting the accessory into the tailstock.

Installation and Removal of Accessories in the Tailstock

To install an accessory into the tailstock, wind the barrel out 1”. Put the accessory in the barrel and snap it into the taper. Most accessories are self-ejecting. To remove the accessory, wind the barrel back until the accessory pops out.

Maple Basket by Robert Martin

Ball Cone Spiral Vase by Johannes Michelsen

The hardware required for setting up the ONEWAY 1224 Lathe is generally attached at it's final destination. Most steps involve removing hardware, attaching a part, then using the same hardware to fasten the part.

Step 1: **Remove the lathe from the shipping shelf.**
Use an 11 mm wrench to loosen the two nuts attaching the lathe to the shipping shelf. If the carriage bolts don't fall through, tap them through. These bolts are not required later. Cut the cable ties attaching the electrical box to the lathe bed and remove the lathe from inside the bench.

Step 2: **Attach the Pendant Brackets.**
Inside the bench there are two pendant brackets. Attach these to the top of the bench with the hardware supplied. The centre rib must face the front.

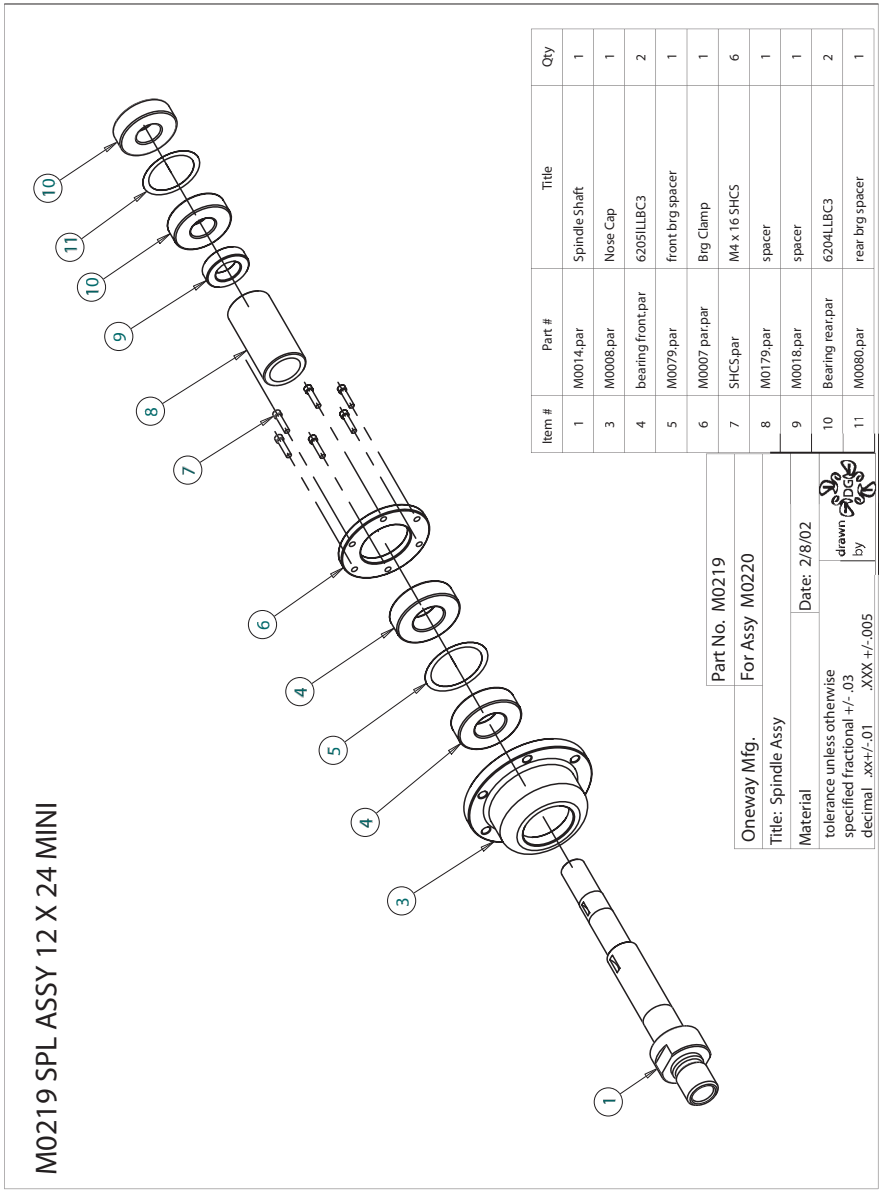
Step 3: **Position the pendant.**
Your pendant will come in one of two ways:
a) The grey control box is physically attached to the pendant arm. If the control box is attached to the pendant arm, then the assembly can be pushed through the hole in the back of the bench as a single unit. After the pendant is through the hole, follow it with the black cover plate. Use the hardware supplied to attach the black cover plate to the bench.
b) The grey control box is not attached to the pendant arm. If the control box is not attached to the pendant arm, then the grey control box needs to be pushed through the hole on its own, followed by the pendant arm, followed by the black cover plate. Attach the cover plate to the bench using the hardware supplied. Once the control box and pendant arm are through the hole, attach the control box to the pendant arm using the hardware supplied.
Mount the pendant onto one of the brackets attached to the bench in step 2.

Step 4: Attach the Shelf
Remove the shelf that the lathe was attached to. Flip the shelf over, making sure the groove in the shelf is at the back left hand corner. Push the motor wire into this groove. Lift the shelf so the left hand side is positioned onto the bracket already attached to the bench. Lift the right hand side of the shelf so it is higher than the holes drilled in the bench for the shelf bracket. Attach the shelf bracket to the right hand side of the bench and lower the shelf onto the support.

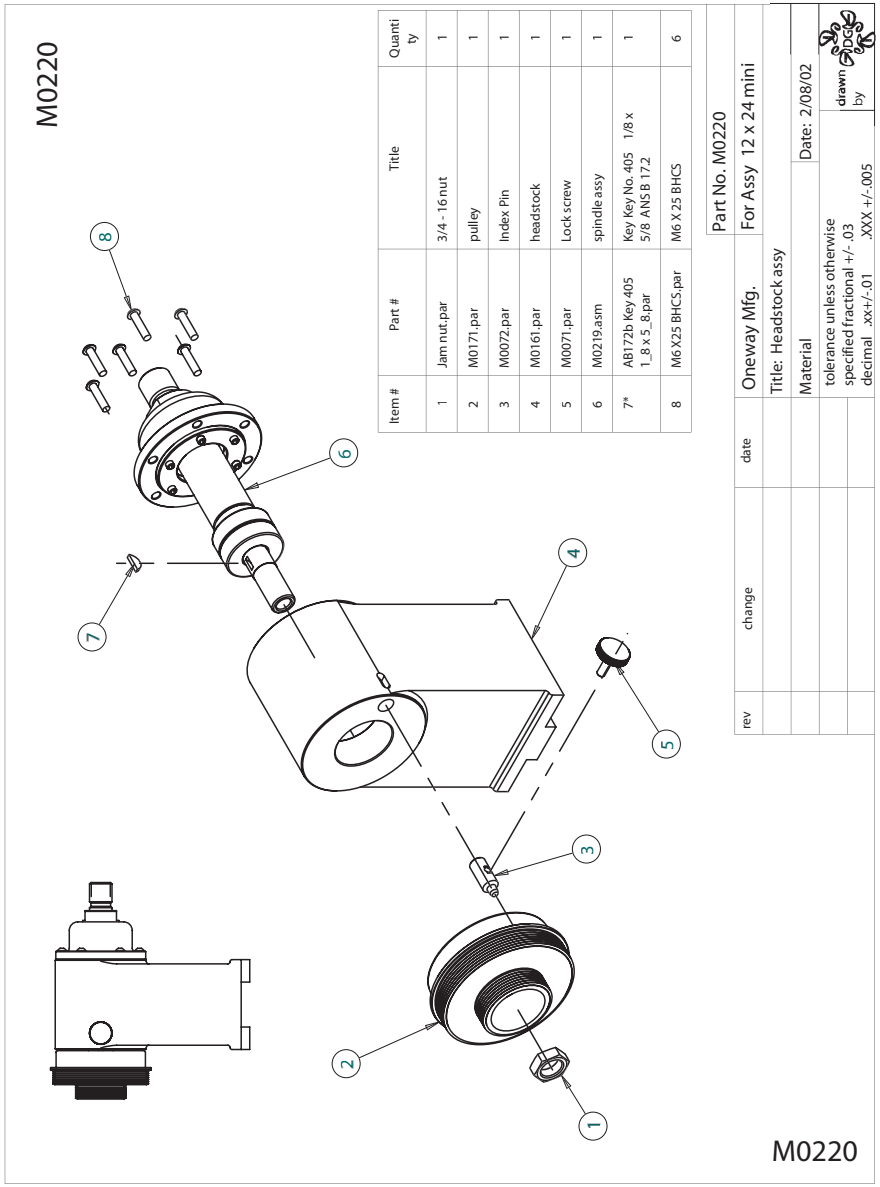
Step 5: Attach the Electrical Box
Remove one nut from each of four bolts on the left hand side of the bench. Hang the electrical box on these bolts and attach it using the four nuts that were just removed.

Step 6: Remove the Bench from the Wooden Pallet
It is a good idea to remove the bench from the wooden skid, while the lathe assembly is not attached. Remove the four nuts, and tap the carriage bolts down so the lathe can be easily removed from the wooden pallet.

Part # M0219—Spindle Assembly



Part # M0220—Headstock Assembly



Item #	Part #	Title	Quanti ty
1	Jam nut.par	3/4 - 16 nut	1
2	M0171.par	pulley	1
3	M0072.par	Index Pin	1
4	M0161.par	headstock	1
5	M0071.par	Lock screw	1
6	M0219.asm	spindle assy	1
7*	AB172b Key.405 1_8 x 5_8.par	Key Key No. 405 1/8 x 5/8 ANSI B 17.2	1
8	M6 X25 BHCS.par	M6 X 25 BHCS	6

Part No. M0220
For Assy 12 x 24 mini
Oneway Mfg.
Title: Headstock assy
Material
Date: 2/08/02
tolerance unless otherwise specified fractional +/- .03 decimal .xx+/-.01 .XXX +/-.005
drawn by DGG

rev	change	date

Step 7: Position the Bench and Leveling Pads
The best location for the lathe is on a level, solid wood or concrete floor. The electrical box and motor should be kept as cool as possible, so avoid putting the lathe where sun will shine directly on the box or in front of a furnace vent. After positioning the bench in it's final location, you will need to put the leveling pads which came in the lathe kit under the feet of the bench. A set screw and nut will be assembled in each foot of the bench. Position the set screw in the hole that is not drilled thru. The lathe does not have to be perfectly level; these leveling pads are for equalizing the pressure of the lathe and bench assembly equally over each foot. We recommend that the lathe bench be bolted to the floor. To do this, position the thru hole in the foot of the bench directly over the thru hole in the leveling pad. A bolt can then be put through these two holes and bolted into the floor. If you do not plan to bolt the lathe to the floor, the position of the leveling pad relative to the position of the bench foot does not matter.

Step 8: Mount the Lathe to the Bench.
a) Remove the belt cover from the lathe using the cover release and set aside.
b) Remove 4 bolts, nuts and washers from the bench - be careful not to lose the nuts and washers from underneath the bench top (three slotted holes will have washers and nuts, one round hole will have a nut only). Position the lathe so the holes in the bottom of the lathe assembly line up with these holes. Starting with the hole in the left front, use one bolt and one nut to fasten the lathe to the bench (this step is easiest with the motor in the 'down' position. Continue clockwise bolting the lathe onto the bench.

Step 9: Attach the Belt Cover
Remove the three screws (and nuts) with a #2 Robertson Screwdriver or slotted equivalent (be careful not to lose the nuts from underneath). Put the belt cover on and lock it into position with the locking mechanism. Fasten the belt cover to the bench using the screws and nuts which were just removed.

Step 10: Install the Belt
Refer to the section "Changing the Belt" to install the Belt.
You can now plug the Lathe into the power source. Turn the lathe on at the electrical box, check for clearances and run the machine.

Lubrication

ONEWAY Lathes, like any mechanical device, needs lubrication to function at its optimum.

Woodturning creates dust and turning wet wood sprays water and chemicals onto the lathe. Some of these chemicals are acidic and can quickly rust the bed.

Minimizing Rust
To minimize bed and tailstock quill rust, apply a heavy duty paste wax. Doing this will not noticeably affect clamping.

How should I care for the Lathe?
After turning, the lathe should be wiped down - particularly the bed. Wiping an oily rag over exposed metal will help keep your lathe functioning better and last longer. Oil on the bed should be wiped off before using the lathe so the tailstock and banjo clamp tightly.

1. The most common cause of the unit shutting itself off is stopping large pieces too quickly which causes excess voltage and the drive tripping out (self-protection). If you press the STOP button and the lathe does not brake, but coasts to a stop, this is what has happened. Refer to the section “If Your Drive Does Trip Out” below, to reset your drive. The drive can also trip itself out if the speed is changed while turning a piece. Keep in mind that as a piece gets more in balance and you increase the speed, even though you have reduced the weight, the increased speed makes stopping more difficult. This is why the lathe might stop normally when you first start a piece but might trip out later when you increase the speed. You can also reduce braking problems by selecting the proper pulley. It is much easier for the drive to stop the lathe if the lathe is on the largest headstock pulley (slowest speed) than if the lathe is on the smallest (fastest speed) headstock pulley. Long acceleration is selected by putting the toggle switch on top of the pendant control box into the forward position.

2. The drive unit also monitors the amount of current and the length of time that current has been flowing. If the motor has been drawing excess current for too long, the drive will shut down to protect the motor. This can happen if the lathe has been running slowly for a long time. To prevent this problem, use the largest headstock pulley (slowest speed) suitable for the job to keep the motor speed high.

3. Sudden high power demands can cause the drive to shut down also. For example, if you have a very large catch, the drive may shut down.

If Your Drive Does Trip Out

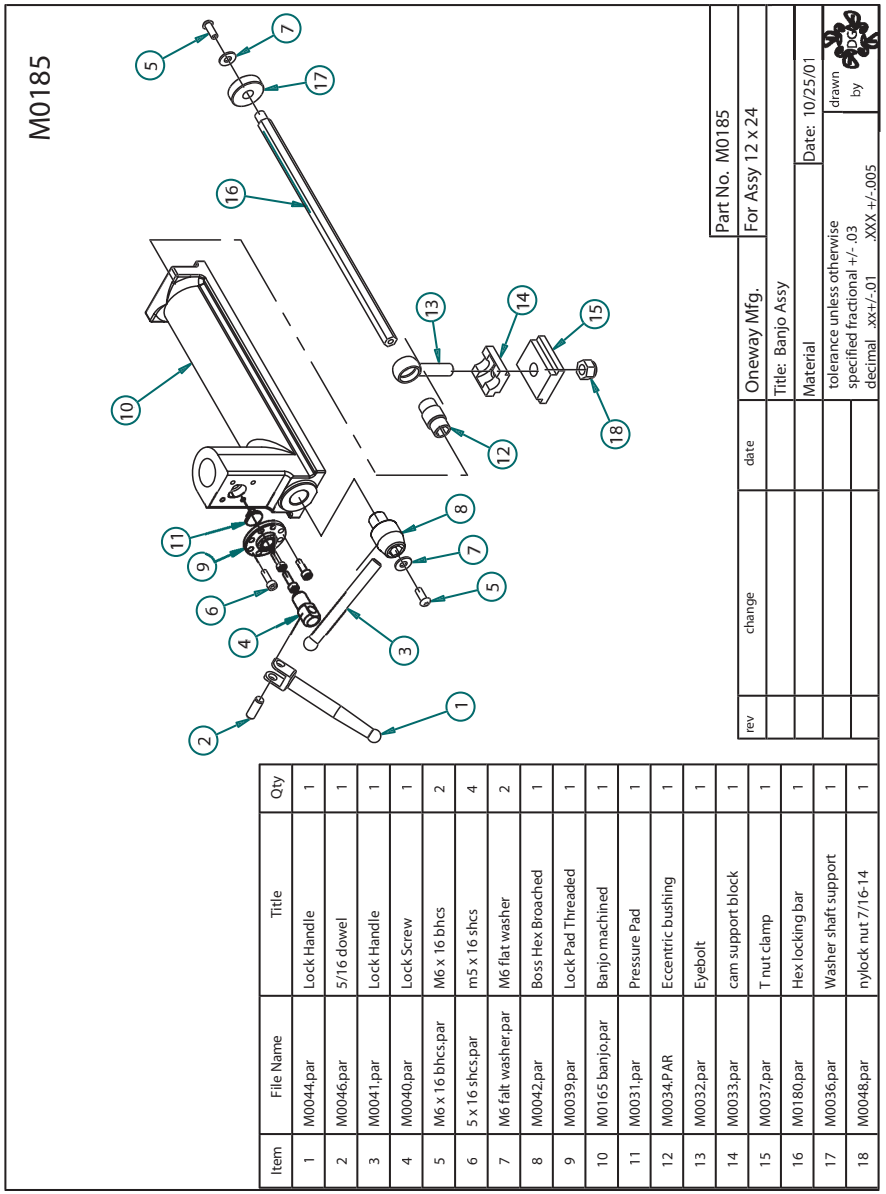
The Drive unit that controls the motor is a very sophisticated drive that constantly monitors the motor, incoming power, and itself. If the unit detects a condition that will cause damage to any part of the drive system, it will shut itself down and the motor will coast to a stop. If this happens, the lathe will not respond to any input from the pendant control.

To reset the Drive, turn the power off.

LET THE LATHE SIT FOR 30 SECONDS, and then turn the power back on.

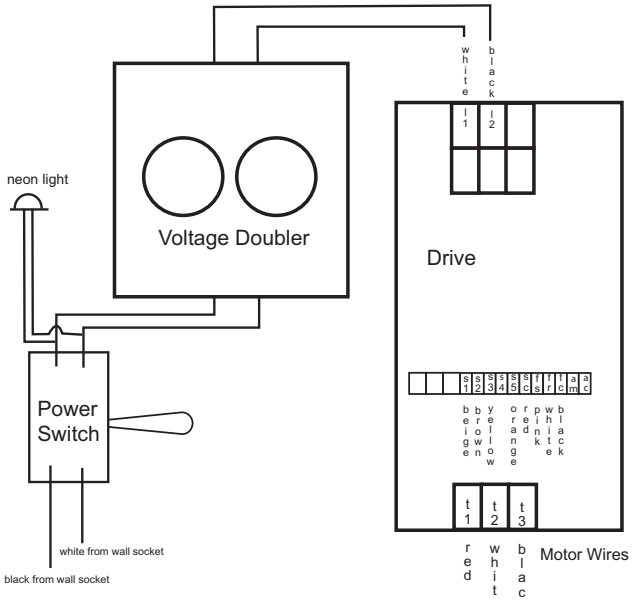
1224 Lathe

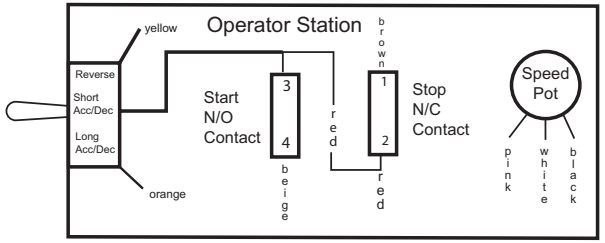
Part # M0815—Banjo Assembly



Item	File Name	Title	Qty
1	M0044.par	Lock Handle	1
2	M0046.par	5/16 dowel	1
3	M0041.par	Lock Handle	1
4	M0040.par	Lock Screw	1
5	M6 x 16 bhcs.par	M6 x 16 bhcs	2
6	5 x 16 shcs.par	m5 x 16 shcs	4
7	M6 falt washer.par	M6 flat washer	2
8	M0042.par	Boss Hex Broached	1
9	M0039.par	Lock Pad Threaded	1
10	M0165 banjo.par	Banjo machined	1
11	M0031.par	Pressure Pad	1
12	M0034.PAR	Eccentric bushing	1
13	M0032.par	Eyebolt	1
14	M0033.par	cam support block	1
15	M0037.par	T nut clamp	1
16	M0180.par	Hex locking bar	1
17	M0036.par	Washer shaft support	1
18	M0048.par	nylock nut 7/16-14	1

Wiring Digaram





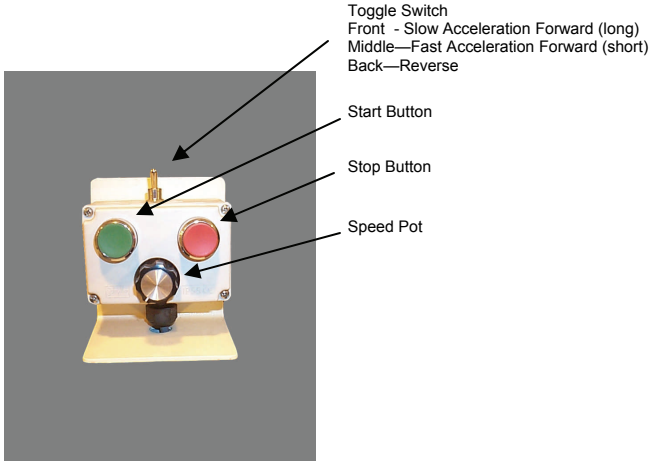
AC Electronic Variable 0 - 4000 RPM
with Full Speed Reverse

- The drive package is fully electronic with speed from 0 - 4000 RPM. Lathes are available with one of two options:
  1. 1 HP -- requiring 110 Volt
  2. 1 HP -- requiring 220 Volt
- Speed ranges are 0-2000 & 0-4000. Changing range is easy and can be completed in under one minute.
- Minimum continuous speed 150 RPM
- The drive motor is mounted directly below the headstock.
- Drive pulley is 2 step 6 groove poly V.
- The controller comes programmed ready for use with built-in ramp up, ramp down and dynamic braking. This is a top quality drive, single phase AC in - three phase out.

Drive Controls

On the Drive Box there is a toggle switch which has two settings:
Power on & Power off

Pendant Controls



ONEWAY Lathes, like any mechanical device, needs lubrication to function at its optimum. Woodturning creates dust and turning wet wood sprays water and chemicals onto the lathe. Some of these chemicals are acidic and can quickly rust the bed. To minimize bed and tailstock quill rust, apply a heavy duty paste wax. Doing this will not noticeably affect clamping. After turning, the lathe should be wiped down - particularly the bed. Wiping an oily rag over exposed metal will help keep your lathe functioning better and last longer. Oil on the bed should be wiped off before using the lathe so the tailstock and banjo clamp tightly.

There are two areas on the lathe that require lubrication: the tailstock and the banjo clamping. The tailstock quill is a precision fit and to maitain factory peformance it should be kept lightly oiled at all times. Wind the quill all the way out, put a few drops of oil on the barrel and wind it in. Putting oil on the clamping mechanism will help ensure long life and good clamping force. To oil the clamp mechanism put a few drops on the shaft through the hole in the back of the tailstock.

Vase & Stand
By Frank Sudol

The banjo uses a patent pending mechanism that eliminates flex in the shaft and ensures tight clamping over the entire range of the banjo. Lubricating the mechanism will ensure that the clamping force is used to clamp the banjo not to overcome friction in the mechanism. Any ~~anti-seize lubricant~~ ~~will work but we find~~ that Fel-Pro anti-seize lubricant C5-A works well. You should only have to lubricate the mechanism when it is not clamping well. Remove the banjo from the lathe and lubricate the sliding cam. Putting oil on the shaft helps ensure that the banjo continues to slide freely.

NOTE: Reprogramming of the drive should only be attempted after you have followed the instructions on "If Your Drive Trips Out" on page 10 and you have also consulted the technical staff at ONEWAY Manufacturing.

Parameter	Setting	Description	Parameter	Setting	Description
C1-01	4	Acc 1	C6-02	5	Carr Freq
C1-02	4	Brake 1	D2-02	2	Min Speed
C1-03	6	Acc 2	E1-04	90	Max Speed
C1-04	12	Brake 2	H1-03	7	Brake Select

Your drive comes preprogrammed from the factory and should never need reprogramming. Before attempting to program the drive, please call ONEWAY at 1-800-565-7288 or 519-271-7611.

When programming the drive, if a number is flashing it is selected and ready to be changed. Digits are selected by the > key and changed with the ^ key. In these instructions if digits are in **red**, it designates flashing.

Turn on the drive. Press the Stop button on the drive. Press the down arrow key once. Drive will read Par.

Press enter. The drive will read **A1** - 01.
Press the > key twice and the drive will read A1 – **01**. Press the ^ key and drive will read A1 – **03**. Press Enter and the drive will read 0000. Use the ^ key to change the digit and the > key to select the digit. Make the display read 3330. Press the Enter key. The drive should read A1 – **03**.

Press the > key once and the drive should read **A**1-03. Press the ^ key until the drive read **C**1-01. Press the > key until the drive reads C1 – **01**. Press the Enter key once and the drive should read 00010.0. Use the > key to select the digit and the ^ key to change the digit. Make the drive read 0004.0. Press Enter. The drive will now flash End and then C1 – **01**.

Press the ^ key once and the drive will read C1 – **02**. Press the Enter key. The drive will read 00010.0. Use the > key to select the digit and the ^ key to change the digit. Make the drive read 0004.0. Then press Enter. The drive will flash End and then C1 – **02**.

Press the ^ key once and the drive will read C1 – **03**. Press the Enter key. The drive will read 00010.0. Use the > key to select the digit and the ^ key to change the digit. Make the drive read 0006.0. Then press Enter. The drive will flash End and then C1 – **03**.

Press the ^ key once and the drive will read C1 – **04**. Press the Enter key. The drive will read 00010.0. Use the > key to select the digit and the ^ key to change the digit. Make the drive read 0012.0. Then press Enter. The drive will flash End and then C1 – **04**.

Now, press the > key twice to select the 1 in C1. The drive will now read C**1** – 04. Press the ^ key until the drive reads C**6** – 01. Press the > key once. The drive should now read C6 – **01**. Press the ^ key until the drive reads C6 – **02**. Press Enter and the drive will read 07. Make it read 05. Press Enter and the drive will flash End and then C6 – **02**.

Press the > key once. The drive should read **D**1 – 01. Press the > key once and the drive reads D**1** – 01. Press the ^ key once. The drive should read D**2** – 01. Press the > key once. The drive will read D2 – **01**. Press the ^ key, and the drive will read D2 – 0**2**. Press Enter. The drive will read 000.0. Make the drive read 002.0. Press Enter. Drive will flash End and then read D2 – **02**.

Press the > key once. The drive should read **D**2 – 02. Press the ^ key until the drive reads **E**1 – 01. Press the > key twice. The drive should read E1 – **01**. Press the ^ key until the drive reads E1 – **04**. Press the Enter key. The drive will read 060.0. Make the drive read 090.0. Press Enter. Drive will flash End and then read E1 – 04.

Press Escape four times. The green DRV diode should be lit and the drive should be ready to run.

Woodturning is an activity that can involve heavy workpieces revolving at high speeds.

ONEWAY Lathes are very heavy solid machines and can rotate pieces faster than most other lathes.

Be Aware!
ONEWAY Lathes are also very quiet. It's is easy to run the lathe faster than you think it is going.

Bark, shavings and pieces of wood can fly from the lathe with considerable force, unexpectedly, at any time.

Wear Protection
Always wear face protection to prevent injury in such instances. Safety glasses will not protect your whole face. Wear a full-face shield and if possible, wear lung protection as well. A powered respirator is a good investment for any woodturner.

Avoid the Firing Line
The best way to avoid injury is to stay out of the firing line. Professional instructors can teach you where to stand to minimize injury potential from flying debris. As when working with any tool, a sensible approach, with simple safety precautions, should be followed.

Hand Wheel Safety
Do not use the 6" Faceplate as a hand wheel. The reinforcing ribs on this faceplate causes a dangerous pinch area with the spindle index and locking mechanism if used as a hand wheel. If you feel a hand wheel is required you should make one from wood and install it with one of 2 bushings supplied with the lathe. Make sure that at least 1½" clearance exists between an installed hand wheel and the spindle lock mechanism. Optionally order part# 2802. This is a hand wheel hub designed for this purpose.

Common Sense Safety Rules

1. Always keep guards in place.
2. Always wear eye protection. Use safety glasses or a full face shield when appropriate. Work in a well-lit environment.
3. Wear lung protection. Wear a dust mask if cutting dry/dusty wood and when sanding.
4. Do not wear loose clothing. Shirts should have short sleeves. Never wear a tie when working with any power equipment.
5. Never wear jewelry (i.e. watches, necklaces, rings and bracelets) while working with a wood lathe.
6. Long hair should be tied up or stuffed into a hat. Long beards can get caught and should be tied back.
7. Keep your shop floor free from objects that can be stumbled over. Woodturning generates lots of chips, which will quickly hide any hazards on the floor. Keep the work area clean. Accidents are less likely to occur in a tidy work area where all sharp tools are put in their proper place.

Before You Start

8. Check your lathe and work area before you start to make sure that everything is in proper working order and there is nothing lying loosely on the lathe. Ensure that the proper belt is selected and that the **speed pot is dialed down to the lowest speed**. Make sure that the workpiece is fastened securely to the lathe and that the toolrest and banjo are tightened. Rotate your work manually before starting power. This will both assure clearances of toolrest, bed, etc. as well as assuring that chuck keys or wrenches have been removed.

While You Are Working

9. Stop the lathe before moving the toolrest. If you move the rest while the lathe is running you risk damaging the lathe, your work piece and your fingers. Never touch the spinning wood.
10. Do not force your tool. A sharp tool used properly will remove wood very quickly without being forced. Pushing hard will lead to many problems, not just safety problems. Always use the proper tool for the job. Keep your tools sharp and clean for best results. Sharp tools are more predictable and behave better than dull tools.
11. Never wrap rags or abrasives around your fingers. They can get caught and cause severe injury.
12. If you have small children around, please be aware that they can walk into the firing line and be hit with chips or other debris.
13. If you hear your lathe making a new sound, stop and investigate. New sounds are usually a sign of something going wrong.
14. Do not turn obviously damaged or weakened wood. Check for splits, cracks or weak spots before mounting it on the lathe. If turning a piece of glued wood, ensure that glue joints are secure.
15. Never leave the lathe running while unattended. Wait until the lathe comes to a complete stop before leaving the area.
16. Always make sure that the lathe is running in forward while turning inboard, and in reverse while turning outboard.
17. Disconnect the power source when the motor is being mounted, connected or reconnected.
18. The Tool Rest: adjust the tool rest height properly; adjust the tool rest so that it is as close to your work piece as possible; remove the tool rest when sanding or buffing.

"IPU POD" by Mike Lee

1. Stop the lathe. Make sure all parts have completely stopped moving. Push the stop button on incoming power on the box.

2. Open the belt cover compartment.

3. Loosen the speed handle and lift the motor. Tighten the speed handle to lock the motor in the raised position.

4. Move the belt to the desired step on the pulley.
• Large MOTOR Pulley / Small SPINDLE Pulley = HIGH speed range
• Small MOTOR Pulley / Large SPINDLE Pulley = SLOW speed range
Note: Ensure the belt is correctly located in the grooves on the pulley.

5. Grasp the motor, loosen the speed handle and lower the motor. Apply downward pressure to the motor and tighten the speed handle. Check the belt again to make sure it is seated correctly in the grooves on the pulley.

6. Close the belt cover compartment.

Attaching & Removing Accessories from the Spindle

A special self supporting wrench is used to install and remove accessories from the spindle. This wrench will drop between the bedways so it does not need to be hand held while attaching and removing accessories.
There are two set screws on all ONEWAY accessories that fit your lathe. Screw the accessory securely onto the spindle and snug up the two set screws using an M4 allen key.

Indexing

The indexing pin is located on the front side of the headstock. To use the spindle indexing, turn the knurled knob counter-clockwise to loosen the mechanism. Slide the pin forward while rotating the spindle by hand. The pin will engage in one of 24 holes, when it does, lock the pin in place by snugging up the brass knob. If the lathe gets turned on while the indexing pin is engaged, the lathe will not be damaged (unless there is belt slippage). If this happens, press the stop button, release the index pin, press the start button and resume working. If the lathe will not re-start, refer to the section on page 10 **'If Your Drive Does Trip Out'**.