

READ THIS FIRST

Model W1758

IMPORTANT UPDATE

Applies to Models Mfd. Since 05/18
and Owner's Manual Revised 6/14



Phone #: (360) 734-3482 • Tech Support: techsupport@woodstockint.com • Web: www.woodstockint.com

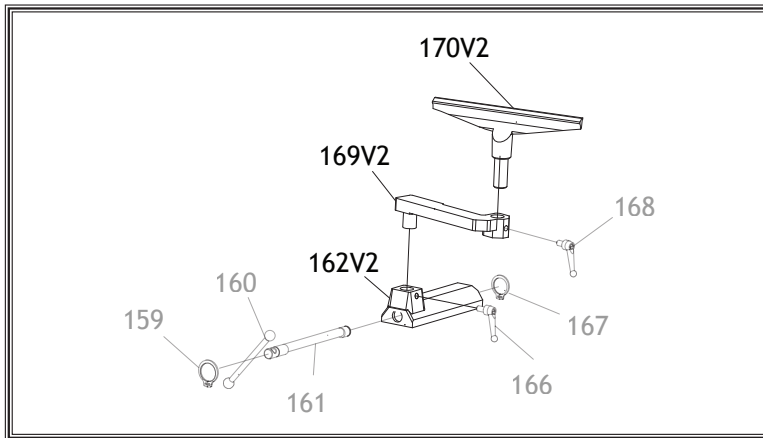
We made the following change to this machine since the manual was printed:

- Parts diagram and parts list revised to show tool rest with 1" post, tool rest body with 1" hole, and tool rest pivot arm with 1" post and hole.

Aside from the information contained in this update, all other content in the owner's manual is applicable and **MUST** be read and understood for your own safety.

IMPORTANT: Keep this update with the owner's manual for future reference. If you have any further questions, contact our Technical Support.

Revised Tool Rest Parts



REF	PART #	DESCRIPTION
162V2	X1758162V2	TOOL REST BASE (1" HOLE) V2.10.17
169V2	X1758169V2	TOOL REST EXTENSION ARM (1") V2.10.17
170V2	X1758170V2	TOOL REST (1" POST) V2.10.17

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Model W1758

IMPORTANT UPDATE

Applies to Models Mfd. Since 11/14
and Owner's Manual Revised 06/14

Phone #: (360) 734-3482 • Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz



We made the following change to this machine since the manual was printed:

- Added port on motor cover for convenient access to ball oiler.

Aside from the information contained in this update, all other content in the owner's manual is applicable and **MUST** be read and understood for your own safety.

IMPORTANT: Keep this update with the owner's manual for future reference. If you have any further questions, contact our Technical Support.

Ball Oiler Lubrication

1. DISCONNECT LATHE FROM POWER!
2. Remove plastic cover shown in **Figure 1** to access motor shaft ball oiler.
3. Push tip of oil can nozzle against ball oiler, then pump can once or twice. Do not over-oil.

Note: Proper lubrication of ball oiler (shown in **Figure 1**) is done with a pump-type oil can that has a plastic or rubberized cone tip. Do not use metal needle or lance tips, as these can push the ball too far into the oiler, break the spring seat, and lodge the ball in the oil galley.

4. Turn lathe **ON** and run for approximately one minute. Rotate variable-speed lever back and forth to distribute oil.
5. Turn lathe **OFF** and re-install plastic cover.

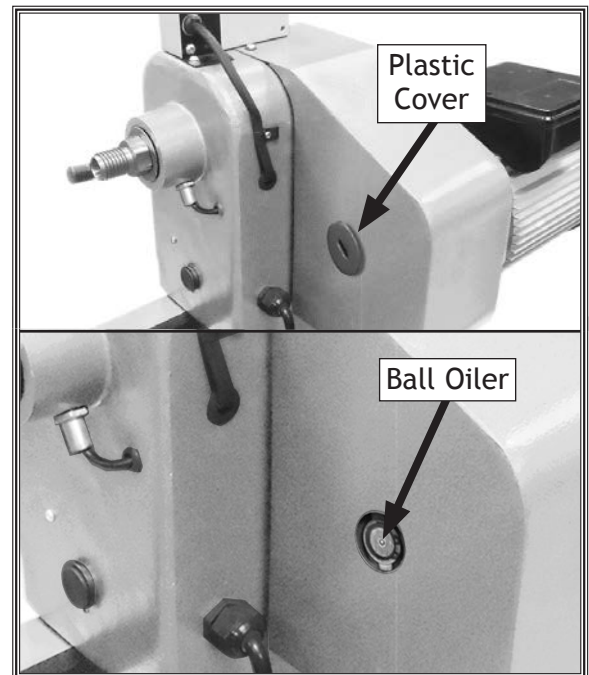


Figure 1. Location to access ball oiler.

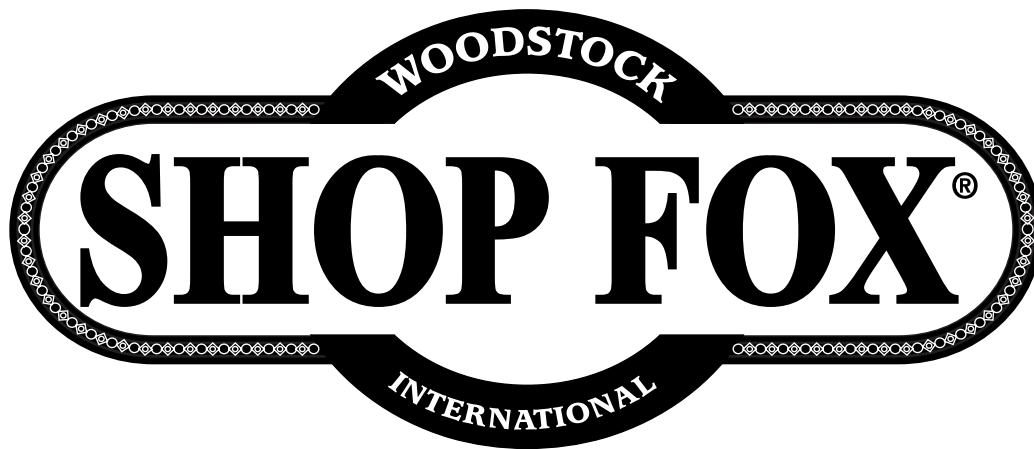
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MODEL W1758
VARIABLE SPEED WOOD LATHE
WITH DIGITAL READOUT



OWNER'S MANUAL

Phone: (360) 734-3482 • Online Technical Support: tech-support@shopfox.biz

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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT
THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC. (FOR MODELS MANUFACTURED SINCE 11/13)**



WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Woodstock Technical Support

This machine has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

Woodstock International, Inc. is committed to customer satisfaction. Our intent with this manual is to include the basic information for safety, setup, operation, maintenance, and service of this product.

We stand behind our machines! In the event that questions arise about your machine, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: tech-support@shopfox.biz. Our knowledgeable staff will help you troubleshoot problems and process warranty claims.

If you need the latest edition of this manual, you can download it from <http://www.shopfox.biz>.

If you have comments about this manual, please contact us at:

Woodstock International, Inc.
Attn: Technical Documentation Manager
P.O. Box 2309
Bellingham, WA 98227
Email: manuals@woodstockint.com

MACHINE SPECIFICATIONS



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MODEL W1758 16" X 46" 2 HP VARIABLE SPEED WOOD LATHE

Product Dimensions

Weight..... 287 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 72-1/2 x 19 x 48 in.
 Footprint (Length x Width)..... 54 x 13-3/4 in.

Shipping Dimensions

Type..... Cardboard Box
 Content..... Machine
 Weight..... 338 lbs.
 Length x Width x Height..... 18 x 64 x 20 in.
 Must Ship Upright..... Yes

Electrical

Power Requirement..... 110V, Single-Phase, 60 Hz
 Prewired Voltage..... 110V
 Full-Load Current Rating..... 14A
 Minimum Circuit Size..... 20A
 Connection Type..... Cord & Plug
 Power Cord Included..... Yes
 Power Cord Length..... 8 ft.
 Power Cord Gauge..... 16 AWG
 Plug Included..... Yes
 Included Plug Type..... 5-15
 Switch Type..... Paddle Safety Switch w/Removable Key

Motors

Main

Horsepower..... 2 HP
 Phase..... Single-Phase
 Amps..... 14A
 Speed..... 1725 RPM
 Type..... TEFC Capacitor-Start Induction
 Power Transfer V-Belt Drive
 Bearings..... Shielded & Permanently Lubricated



Main Specifications

Operation Information

Swing Over Bed.....	16 in.
Distance Between Centers.....	46 in.
Max. Distance Tool Rest to Spindle Center.....	6-1/2 in.
No of Spindle Speeds.....	Variable
Spindle Speed Range.....	600 - 2400 RPM
Floor to Center Height.....	43 in.
Headstock Rotation.....	0, 60, 90, 120, 180 deg.

Spindle Information

Spindle Taper.....	MT#2
Spindle Thread Size.....	1" x 8 TPI
Spindle Thread Direction.....	Right Hand
Spindle Bore.....	3/8 in.
Type of Included Spindle Center.....	Spur

Tool Rest Information

Tool Rest Width.....	12 in.
Tool Rest Post Diameter.....	25 mm

Tailstock Information

Tailstock Taper.....	MT#2
Type of Included Tailstock Center.....	Live

Construction

Bed.....	Precision-Ground Cast Iron
Frame.....	Cast Iron
Stand.....	Cast Iron
Base.....	Cast Iron
Headstock.....	Cast Iron
Tailstock.....	Cast Iron
Paint Type/Finish.....	Enamel

Other Related Information

Mobile Base.....	D2058A, D2246A
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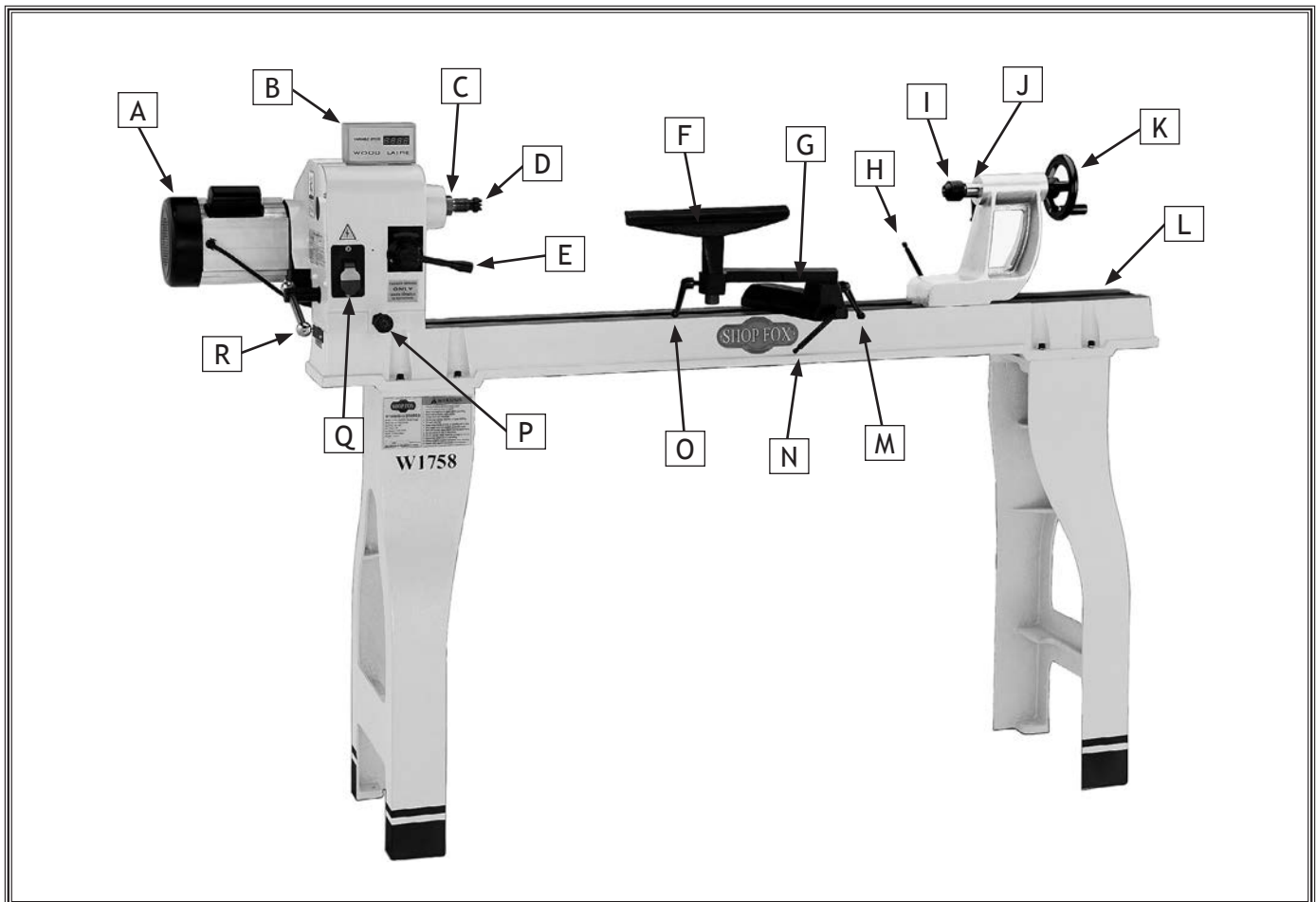
Other

Country of Origin	China
Warranty	2 Years
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	ID Label
ISO 9001 Factory	Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL)	No

Features

- Heavy-Duty Precision-Ground Cast-Iron Bed and Cast-Iron Legs Ensures Stability and Minimal
- Quick Lock/Release Levers for Tailstock and Headstock
- Outboard Turning is Easy with Standard Tool Rest Extension
- Spindle Tachometer with Digital Readout
- Variable Speed from 600 to 2400 RPM

Controls and Features



- | | |
|----------------------------------|--------------------------------------|
| A. Motor | J. Quill Locking Lever |
| B. Digital Readout | K. Quill Handwheel |
| C. Spindle | L. Lathe Bed |
| D. Spur Center | M. Tool Rest Extension Locking Lever |
| E. Speed Control Lever | N. Tool Rest Base Locking Lever |
| F. Tool Rest | O. Tool Rest Locking Lever |
| G. Tool Rest Base with Extension | P. Headstock Rotation Locking Pin |
| H. Tailstock Locking Lever | Q. ON/OFF Switch with Lockout Key |
| I. Live Center | R. Headstock Locking Lever |

SAFETY

For Your Own Safety, Read Manual Before Operating Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures—this responsibility is ultimately up to the operator!



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment or a situation that may cause damage to the machinery.

Standard Machinery Safety Instructions

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow an electrician or qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This eliminates the risk of injury from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of workpiece control.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

INTENDED USAGE. Only use machine for its intended purpose—never make modifications without prior approval from Woodstock International. Modifying machine or using it differently than intended will void the warranty and may result in malfunction or mechanical failure that leads to serious personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris—make sure they are properly installed, undamaged, and working correctly.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside, resulting in a short. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact Technical Support at (360) 734-3482.

MAIN INJURY HAZARDS: Death or crushing injury from getting entangled in rotating spindle or workpiece; death, blindness, or broken bones from being struck by a workpiece that breaks apart or comes loose during rotation, turning tool kickback, or flying wood chips. To minimize your risk of these hazards, always heed the following warning information:

INTEGRITY OF STOCK. Verify each workpiece is free of knots, splits, nails, or foreign material to ensure it can safely rotate on spindle without breaking apart or causing turning tool kickback.

WORKPIECE PREPARATION. Before mounting, cut off waste portions with a bandsaw or other tool to ensure workpiece has no large edges to catch turning tool, and it will rotate without dangerous wobbling.

SECURING LOCKS. Verify tool rest, headstock, and tailstock are secure before turning lathe **ON**.

SECURING WORKPIECE. An improperly secured workpiece can fly off spindle with deadly force. Use proven setup techniques and always verify workpiece is well-secured before starting lathe. Only use high-quality fasteners with non-tapered heads for faceplate attachment.

TOOL SUPPORT. An improperly supported tool may be grabbed or ejected. Adjust tool rest approximately 1/4" away from workpiece and 1/8" above workpiece center line to provide proper support for turning tool. Firmly hold turning tool with both hands against tool rest.

TOOL KICKBACK. Occurs when turning tool is ejected from workpiece with great force, striking operator or bystanders. Commonly caused by poor workpiece selection/preparation, improper tool usage, or improper machine setup or tool rest adjustment.

ADJUSTMENT TOOLS. Remove all chuck keys, wrenches, and adjustment tools before turning lathe **ON**. A tool left on the lathe can become a deadly projectile when spindle is started.

SAFE CLEARANCES. Before starting spindle, verify workpiece has adequate clearance by hand-rotating it through its entire range of motion.

EYE/FACE PROTECTION. Always wear a face shield and safety glasses when operating lathe.

PROPER APPAREL. Do not wear gloves, necktie or loose clothing. Keep long hair away from rotating spindle.

SPEED RATES. Select correct spindle speed for workpiece size, type, shape, and condition. Use low speeds when roughing or when turning large, long, or non-concentric workpieces. Allow spindle to reach full speed before turning.

NEW SETUPS. Test each new setup by starting spindle rotation at the lowest speed and standing to the side of the lathe until workpiece reaches full speed and you can verify safe rotation.

ROUGHING. Use correct tool. Take light cuts, use low speeds, and firmly support tool with both hands.

SHARP TOOLS. Only use sharp turning tools—they cut with less resistance than dull tools. Dull turning tools can catch or grab and pull your hands into the rotating workpiece.

STOPPING SPINDLE. Always allow spindle to completely stop on its own. Never put hands or another object on spinning workpiece.

ADJUSTMENTS/MAINTENANCE. Make sure wood lathe is turned **OFF**, disconnected from power, and all moving parts are completely stopped before doing adjustments or maintenance.

MEASURING WORKPIECE. Only measure workpiece after it has stopped. Trying to measure a spinning workpiece increases entanglement risk.

SANDING/POLISHING. To reduce entanglement risk, remove tool rest before sanding. Never completely wrap sandpaper around workpiece.

ELECTRICAL

⚠️ WARNING
 The machine must be properly set up before it is safe to operate. **DO NOT** connect this machine to the power source until instructed to do so in the "Test Run" portion of this manual.

110V Operation

The Model W1758 is wired for 110V operation. We recommend connecting this machine to a dedicated circuit with a verified ground, using the circuit size below as a minimum. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes.

This machine must be grounded! The electrical cord supplied with this machine comes with a grounding pin. If your outlet does not accommodate a ground pin, have it replaced by a qualified electrician.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire or circuit overload hazard—consult a qualified electrician to reduce this risk.

Extension Cords

We do not recommend using an extension cord; however, if you have no alternative, use the following guidelines:

- Use a cord rated for Standard Service (S).
- Do not use an extension cord longer than 50 feet.
- Ensure that the cord has a ground wire and pin.
- Use the gauge size listed below as a minimum.

Electrical Specifications

Operating Voltage	Amp Draw	Min. Circuit Size	Plug/Receptacle	Extension Cord
110V Operation	14 Amps	20 Amps	NEMA 5-15	14 Gauge

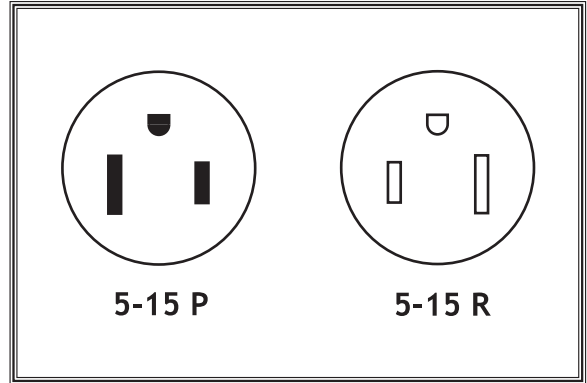


Figure 1. NEMA 5-15 plug and receptacle.

⚠️ WARNING

DO NOT work on your electrical system if you are unsure about electrical codes and wiring! Seek assistance from a qualified electrician. Ignoring this warning can cause electrocution, fire, or machine damage.

ELECTRICAL

SETUP

Unpacking

This machine has been carefully packaged for safe transportation. If you notice the machine has been damaged during shipping, please contact your authorized Shop Fox dealer immediately.

Inventory

The following is a description of the main components shipped with the Model W1758. Lay the components out to inventory them.

Note: *If you can't find an item on this list, check the mounting location on the machine or examine the packing materials carefully. Occasionally we pre-install certain components for safer shipping.*

Box 1 Inventory (Figures 2-3)	Qty
A. Lathe Unit	1
B. Faceplate 6"	1
C. Hardware Bag	1
D. Knockout Tool	1
E. Flat Wrenches 32mm.....	2
F. Spur Center.....	1
G. Live Center	1
H. Tool Rest Handle.....	1
I. Hex Wrenches 3, 4, 6mm	1 Ea
J. Cap Screws M8-1.25 x 35mm	8
K. Quill locking lever.....	1
L. Lock Washers 8mm	8

Box 2 Inventory (Figure 4)	Qty
M. Right Leg.....	1
N. Left Leg	1

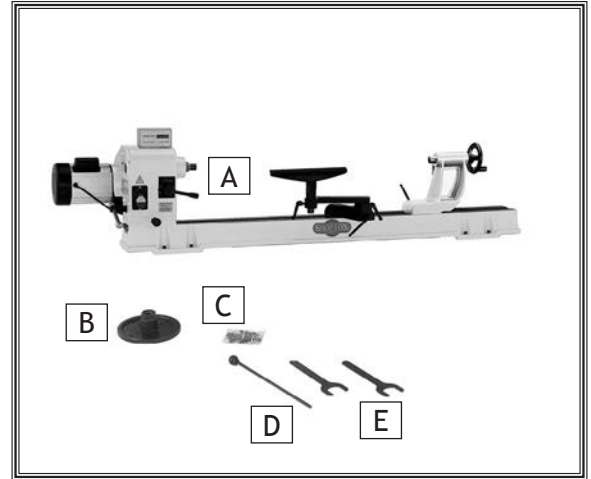


Figure 2. Box 1 inventory.

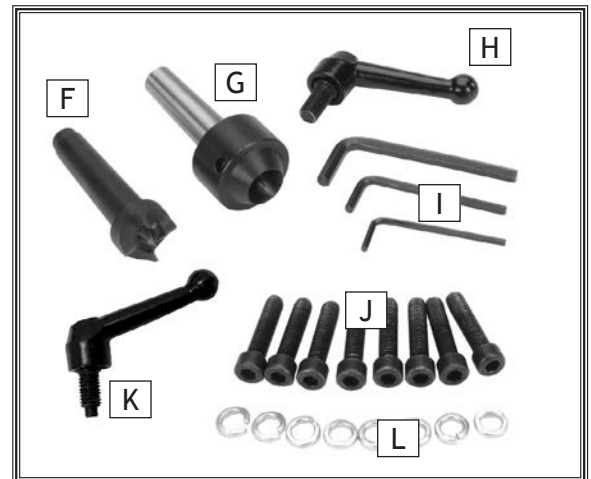


Figure 3. Hardware bag inventory.

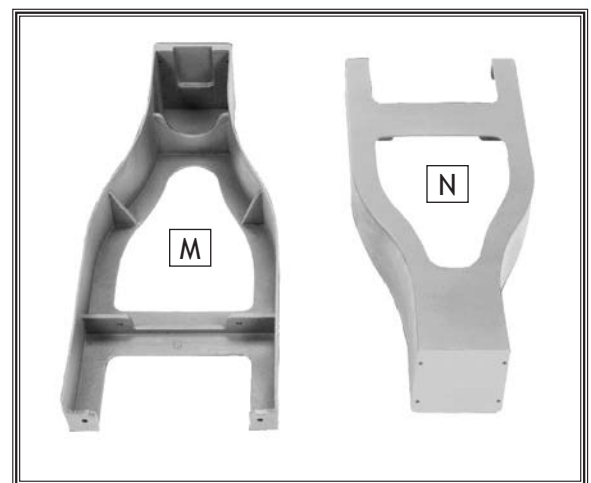
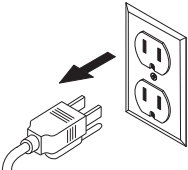


Figure 4. Box 2 inventory.



! WARNING

Keep machine disconnected from power until instructed otherwise.

SETUP

Machine Placement

- **Floor Load:** This lathe distributes a heavy load in a small footprint. Some residential floors may require additional bracing to support both machine and operator.
- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your wood lathe.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.
- **Electrical:** Electrical circuits must be dedicated or large enough to handle amperage requirements. Outlets must be located near each machine, so power or extension cords are clear of high-traffic areas. Follow local electrical codes for proper installation of new lighting, outlets, or circuits.

Cleaning Machine

The table and other unpainted parts of your machine type are coated with a waxy grease that protects them from corrosion during shipment. Clean this grease off with a solvent cleaner or citrus-based degreaser. **DO NOT** use chlorine-based solvents such as brake parts cleaner or acetone—if you happen to splash some onto a painted surface, you will ruin the finish.

	<p>! WARNING NEVER clean with gasoline or other petroleum-based solvents. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!</p>
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	<p>! WARNING USE helpers or power lifting equipment to lift this lathe. Otherwise, serious personal injury may occur.</p>
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	<p>! CAUTION ALWAYS work in well-ventilated areas far from possible ignition sources when using solvents to clean machinery. Many solvents are toxic when inhaled or ingested. Use care when disposing of waste rags and towels to be sure they DO NOT create fire or environmental hazards.</p>
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	<p>! CAUTION MAKE your shop “child safe.” Ensure that your workplace is inaccessible to youngsters by closing and locking all entrances when you are away. NEVER allow untrained visitors in your shop when assembling, adjusting or operating equipment.</p>
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SETUP

Mounting to Shop Floor

Although not required, we recommend that you mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. Generally, you can either bolt your machine to the floor or mount it on machine feet. Both options are described below. Whichever option you choose it will be necessary to use a precision level to level your machine.

Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (Figure 5) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.



Figure 5. Typical fasteners for mounting to concrete floors.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine at a later point.

Using Machine Feet

Using machine feet, shown in Figure 6, gives the advantage of fast leveling and vibration reduction. The large size of the foot pads distributes the weight of the machine to reduce strain on the floor.



Figure 6. Machine foot example.

Assembly

To assemble your lathe, do these steps:

1. Stand the right and left legs upright approximately 41" apart, and get them reasonably aligned, as shown in Figure 7.
2. Using the help of assistants, carefully lift the lathe onto the stands and align the mounting holes.

Note: The headstock end is the heaviest and usually requires two people lifting at that end.



Figure 7. Legs approximately 41" apart.

3. Using the 6mm hex wrench, secure the lathe to the legs with the eight cap screws and lock washers, as shown in **Figure 8**.
4. Install the handle into the tool rest, as shown in **Figure 9**.
5. Align the quill keyway with the entry hole of the quill lock lever (see **Figure 10**), then install the lever into the tailstock so that the end of it mates with the quill keyway.

Note: Make sure the dog-end of the lock lever fits into the quill keyway so that the quill can move in and out of the tailstock without rotating.

⚠ WARNING

To safely secure a center in the tailstock quill, the quill locking lever must be aligned with the quill keyway and fully tightened. Failure to follow this procedure could result in the spinning workpiece or center being thrown from the lathe, causing death or serious personal injury.

6. Secure the digital readout to the top of the headstock, as shown in **Figure 11**.

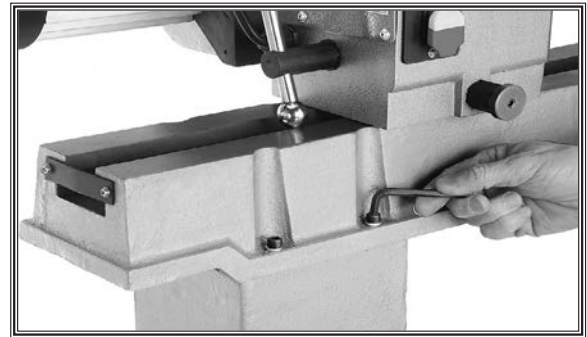


Figure 8. Securing lathe to legs.



Figure 9. Installing tool rest handle.

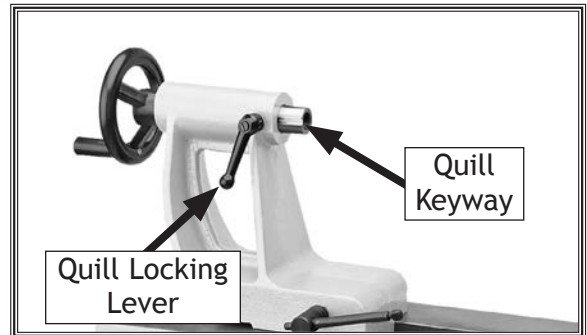


Figure 10. Quill locking lever installed.

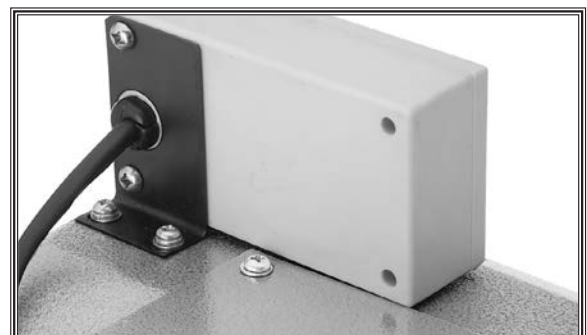


Figure 11. Digital readout installed onto the headstock (viewed from the back).

SETUP

Test Run

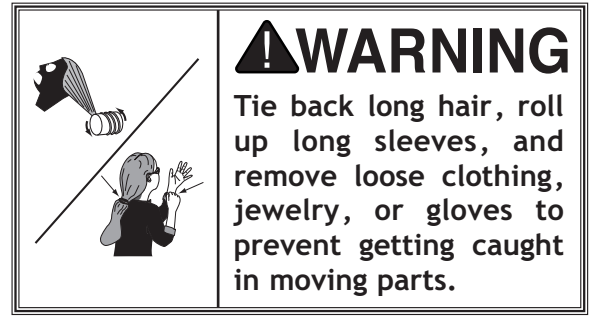
Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the switch disabling mechanism works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 30**. If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

To test run the machine, do these steps:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is setup properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Connect the machine to the power source.
4. Turn the lathe **ON** by lifting up on the ON/OFF switch, and verify that it operates correctly.
 - When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.
 - Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
5. Turn the machine **OFF** by pushing down on the ON/OFF switch.
6. Remove the switch disabling key (see **Figure 12**).
7. Try to start the machine with the switch.
 - If the machine does not start, the switch disabling feature is working as designed.
 - If the machine starts, immediately stop the machine. The switch disabling feature is not working correctly. Call Tech Support for help.



SETUP

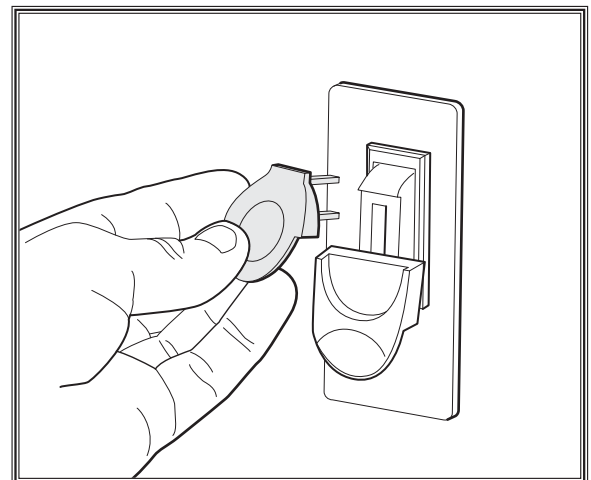


Figure 12. Removing lockout key from switch.

OPERATIONS

General

This lathe will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. **If at any time you are experiencing difficulties performing any operation, stop using the machine!**

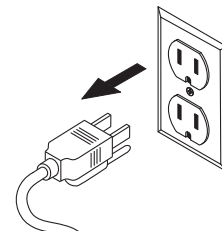
If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced *wood lathe* operator before performing any unfamiliar operations. **Above all, your safety should come first!**

WARNING



READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!

WARNING



DO NOT investigate problems or adjust the machine while it is running. Wait until the machine is turned **OFF**, unplugged and all working parts have come to a complete stop before proceeding!

WARNING



Always wear an approved safety face shield and a respirator when operating this machine. Failure to comply may result in serious personal injury.

Adjusting Headstock

The Model W1758 headstock can be positioned anywhere along the bed and swiveled 360°.

To position the headstock along the length of the lathe bed, do these steps:

1. DISCONNECT THE LATHE FROM POWER!
2. Loosen the headstock locking lever (see **Figure 13**).
3. Position the headstock along the lathe bed and secure it in place by tightening the locking lever.

Note: The large clamping hex nut underneath the headstock may require occasional adjusting to ensure proper clamping pressure of the headstock to the bed.

To swivel the headstock, do these steps:

1. DISCONNECT THE LATHE FROM POWER!
2. Loosen the headstock locking handle (see **Figure 13**).
3. Pull out the headstock rotation locking pin (see **Figure 14**), and rotate the headstock in place.
4. Release the locking pin to secure the headstock in one of the five pre-set positions: 0°, 60°, 90°, 120°, or 180°.
5. Re-tighten the headstock locking lever.

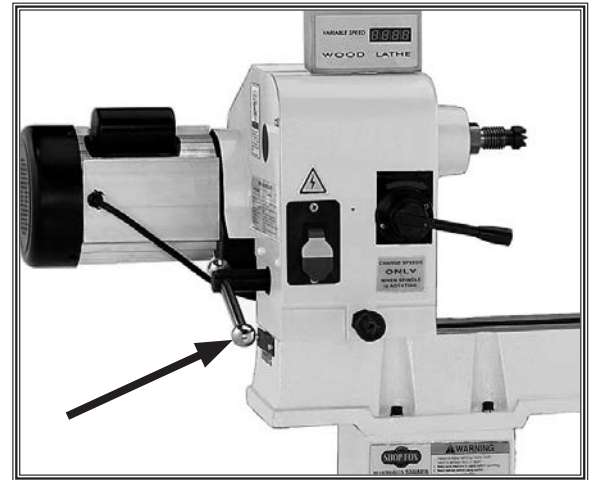


Figure 13. Headstock locking lever.

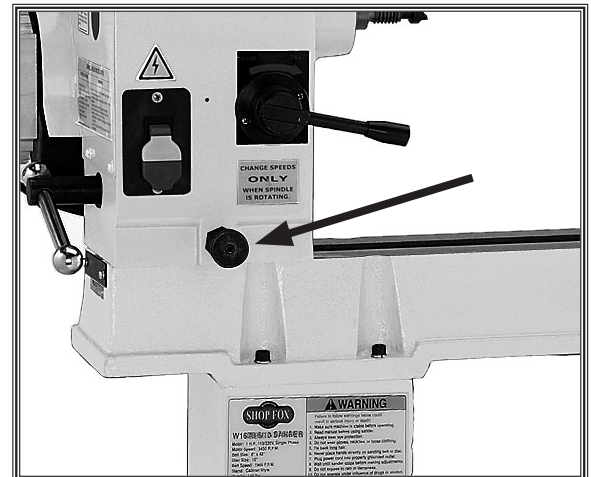


Figure 14. Headstock rotation locking pin.

WARNING

Always keep the headstock firmly locked in place with both the headstock locking lever and the headstock rotation locking pin during lathe operation. Otherwise, the headstock could unexpectedly move and send the moving workpiece, spindle, or faceplate toward you. Failure to heed this warning could result in serious personal injury.

Adjusting Tailstock

The tailstock is equipped with a cam-action clamping system to secure it to the lathe bed. When the locking lever is tightened, a locking plate lifts up underneath the bed and secures the tailstock in place.

To position the tailstock along the length of the bed, do these steps:

1. Loosen the tailstock locking lever (see **Figure 15**), and move the tailstock in position.
2. Re-tighten the locking lever to secure the tailstock in place.

Note: The large clamping hex nut underneath the tailstock may require occasional adjusting to ensure proper clamping pressure of the headstock to the bed.

Adjusting Tool Rest

The Model W1758 comes with a three-way adjustable tool rest (see **Figure 16**).

- Use the base locking lever to position the tool rest along the length of the bed.
- Use the extension locking lever to secure the tool rest a working distance from the bed or workpiece.
- Use the tool rest locking lever to adjust the height of the tool rest relative to the workpiece.

For safety and good turning results, we recommend the tool rest be positioned approximately $\frac{1}{4}$ " away from the workpiece, and approximately $\frac{1}{8}$ " above the workpiece center line (see **Figure 17**).

⚠ CAUTION

Always keep the tool rest assembly firmly locked in place during lathe operation. Otherwise, the tool rest could unexpectedly slip and draw the turning tool and your hand into the spinning workpiece. Failure to heed this warning could result in serious personal injury.

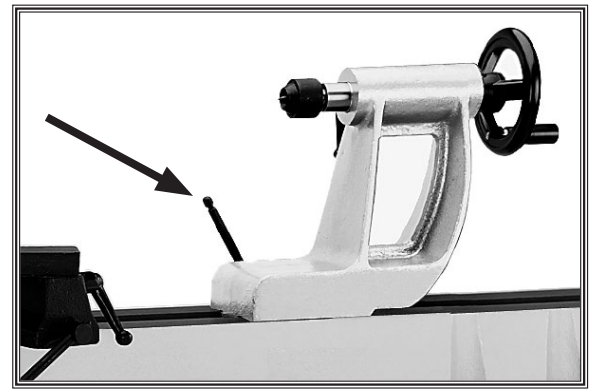


Figure 15. Tailstock locking lever.

⚠ WARNING

Always keep the tailstock firmly locked in place with the tailstock locking lever during lathe operation. Otherwise, the tailstock could unexpectedly move and send the spinning workpiece or center toward you. Failure to heed this warning could result in death or serious personal injury.

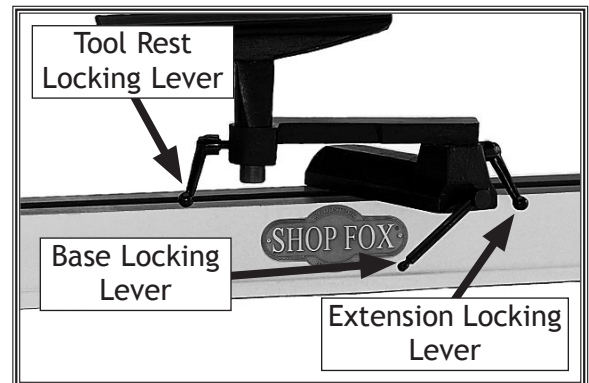


Figure 16. Tool rest controls.

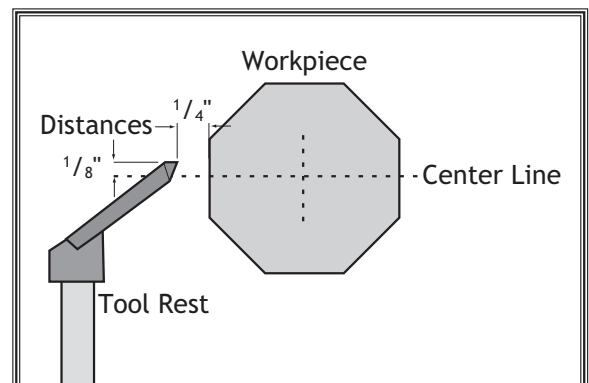


Figure 17. Tool rest position relative to workpiece.

Installing/Removing Headstock Center

The included spur center installs into the headstock spindle with an MT#2 tapered fit.

To install the headstock spur center, do these steps:

1. DISCONNECT THE LATHE FROM POWER!
2. Move the tailstock and tool rest to a safe working distance from the headstock.
3. If the faceplate is installed, remove it (refer to Page 20 for instructions).
4. Make sure the mating surfaces of the spur center and spindle are free of debris and oily substances before inserting the center.
5. Insert the tapered end of the center into the spindle, and push it in with a quick, firm motion (see Figure 18).
6. Make sure the spur center is securely installed by attempting to pull it out by hand—a properly installed center will not pull by hand.

To remove the headstock spur center, do these steps:

1. DISCONNECT THE LATHE FROM POWER!
2. Hold a clean rag under the spindle or wear a glove to catch the spur center when you remove it.
3. Insert the knockout tool through the outboard end of the spindle and firmly tap the center, catching it as it falls (see Figure 19).

⚠ WARNING

Before beginning any turning operation, make sure the headstock and tailstock centers are properly aligned. Refer to *Aligning Headstock & Tailstock Centers* on Page 28 for instructions on this procedure. Failure to heed this warning could result in the spinning workpiece being thrown from the lathe resulting in death or serious personal injury.

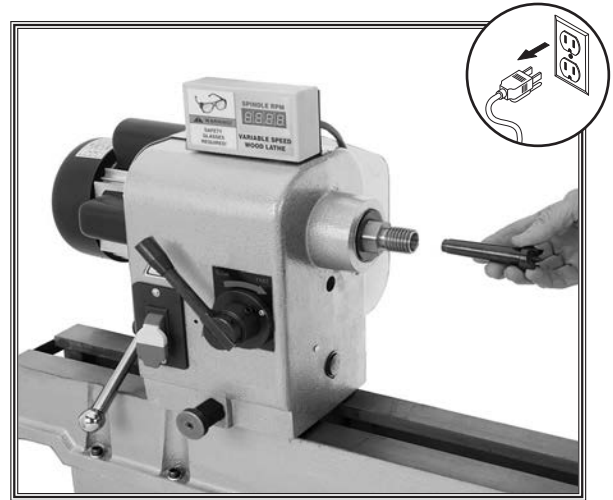


Figure 18. Installing the headstock center.

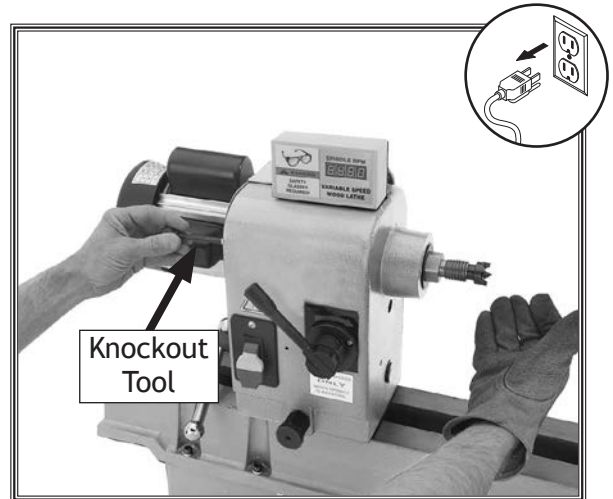


Figure 19. Removing the headstock center.

Installing/Removing Tailstock Center

The included live center installs into the tailstock quill with an MT#2 tapered fit.

To install the tailstock live center, do these steps:

1. Move the tailstock to a safe working distance away from the tool rest and headstock.
2. Loosen the quill locking lever, then rotate the quill handwheel clockwise until the quill extends out from the tailstock about 1" (see **Figure 20**).
3. Make sure the mating surfaces of the live center and quill are free of debris and oily substances before inserting the center.
4. Insert the tapered end of the center into the quill with a quick, firm motion.
5. Make sure the center is secure by attempting to pull it out by hand—a properly installed center will not pull out by hand.
6. Tighten the quill locking lever to hold the quill and center in place.

Note: Make sure the quill locking lever is aligned with the quill keyway to prevent the quill from rotating during use.

To remove the tailstock live center, do these steps:

1. Loosen the quill locking lever.
2. Hold a clean rag under the center or wear a glove to catch the center when you remove it.
3. Rotate the quill handwheel counterclockwise—the quill will retract back into the tailstock causing the center to be forced out.

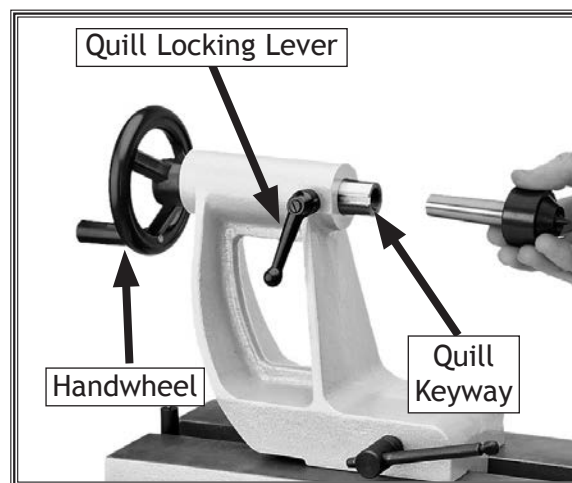


Figure 20. Installing the tailstock center.

! WARNING

Always lock the quill in place during lathe operation. Before tightening the quill locking lever, it must be properly aligned with the keyway on the quill. Otherwise, the spinning workpiece could be thrown from the lathe causing death or serious personal injury.

Installing/Removing Faceplate

The faceplate is used for removing material from the face of the workpiece, such as in hollowing operations. The faceplate can be installed only if the center has been removed from the headstock spindle.

To install the faceplate onto the spindle, do these steps:

1. DISCONNECT THE LATHE FROM POWER!
2. If the headstock center is installed, remove it (refer to Page 18 for instructions).
3. Thread the faceplate onto the headstock spindle.
4. Using the two included 34mm flat wrenches, tighten the faceplate, as shown in Figure 21.

Note: To remove the faceplate, reverse Steps 3-4.

For detailed instructions on mounting a workpiece to the faceplate, refer to Faceplate Turning on Page 24.

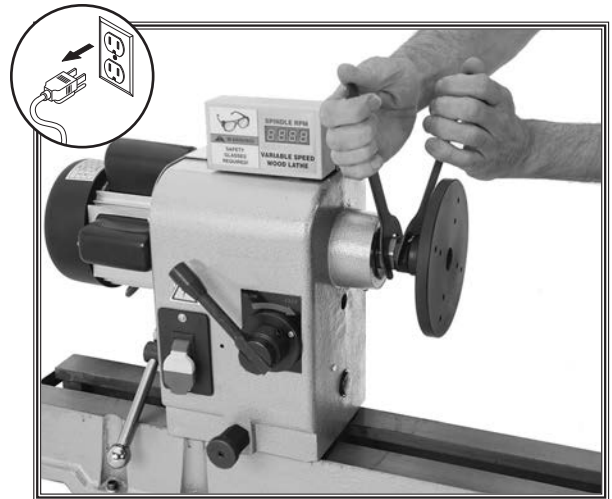


Figure 21. Tightening faceplate onto headstock spindle.

⚠️ WARNING

Always make sure that the workpiece is firmly attached to the faceplate and the faceplate is fully tightened onto the headstock spindle before turning the lathe *ON*. Otherwise the spinning workpiece or faceplate could fly off the spindle and cause death or serious personal injury.

Selecting Turning Tools

Lathe chisels come in a variety of shapes and sizes, and usually fall into five major categories. See **Figures 22-25** for some examples.

Gouges: Mainly used for rough cutting, detail cutting, and cove profiles. The rough gouge is a hollow, double-ground tool with a round nose, and the detail gouge is a hollow, double-ground tool with either a round or pointed nose.

Skew Chisels: A very versatile tool that can be used for planing, squaring, V-cutting, beading, and parting off. The skew chisel is flat, double-ground with one side higher than the other—usually at an angle of 20°-40°.

Scrapers: Typically used where access for other tools is limited, such as hollowing operations. This is a flat, double-ground tool that comes in a variety of profiles (round nose, spear point, square nose, etc.) to match many different contours.

Parting Tools: Used for sizing and cutting off work. This is a flat tool with a sharp pointed nose that may be single or double-ground.

Specialty Tools: These unique, special function tools aid in hollowing, bowl making, cutting profiles, etc.

Refer to **Accessories** on **Page 26** for examples of recommended wood chisels.

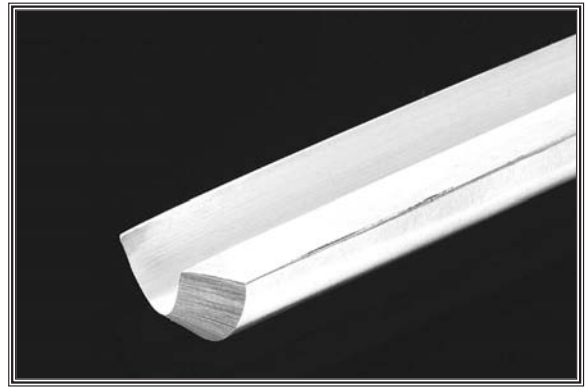


Figure 22. Example of a gouge.

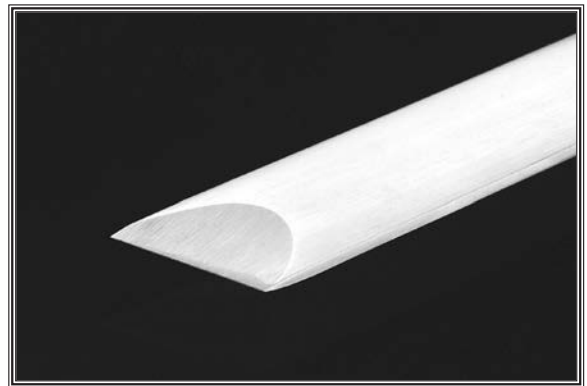


Figure 23. Example of a skew chisel.



Figure 24. Example of a round nose scraper.



Figure 25. Example of a parting tool.

Spindle Turning

Spindle turning is the operation performed when a workpiece is mounted between the headstock and tailstock centers (see **Figure 26**).

!WARNING

Before beginning any turning operation, make sure the headstock and tailstock centers are properly aligned. Refer to *Aligning Headstock & Tailstock Centers* on *Page 28* for instructions on this procedure. Failure to heed this warning could result in the spinning workpiece being thrown from the lathe resulting in death or serious personal injury.

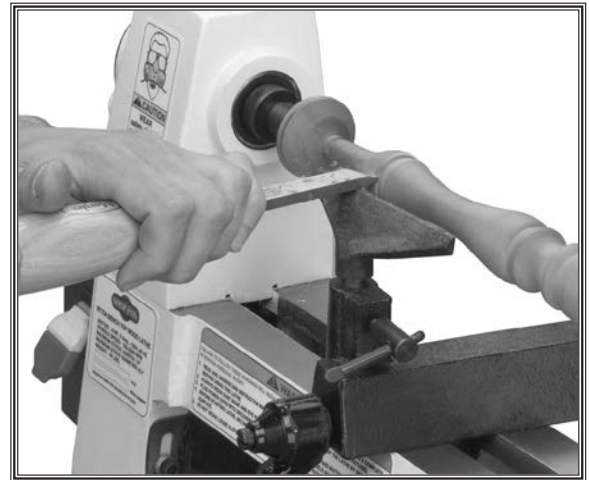


Figure 26. Typical spindle turning operation.

To set up a spindle turning operation, do these steps:

1. Find the center point of both ends of your workpiece by drawing diagonal lines from corner to corner across the end of the workpiece (see **Figure 27**).
2. Using a wood mallet, tap the point of the spur center into the center of the workpiece on both ends, leaving an indented center mark.
3. Use a $\frac{1}{4}$ " drill bit to drill a $\frac{1}{4}$ " deep hole at the center mark on the workpiece end to be mounted on the headstock spur center.
4. To help embed the spur center into the workpiece, cut $\frac{1}{8}$ " deep saw kerfs into the same workpiece end along the diagonal lines marked in **Step 1**.
5. If your workpiece is over 2" x 2", cut the corners off the workpiece length-wise to make turning the corners safer and easier.
6. Drive the spur center into the workpiece end center mark with a wood mallet to embed it at least $\frac{1}{4}$ " into the workpiece (see **Figure 28**).
7. With the workpiece still attached, insert the spur center into the headstock spindle (refer to **Installing Headstock Center** on *Page 18* for instructions).

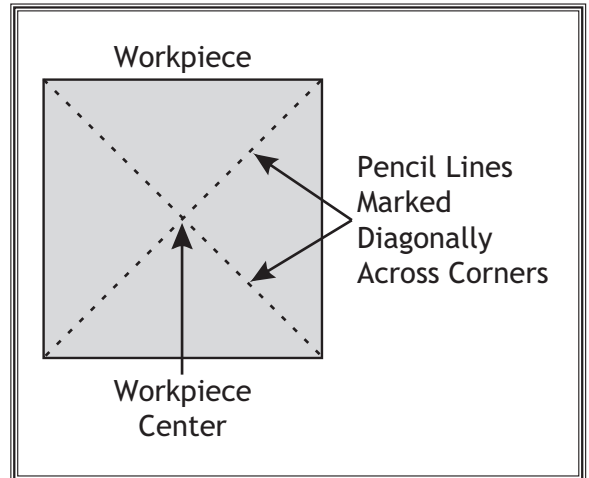


Figure 27. Workpiece marked diagonally from corner to corner to determine the center.

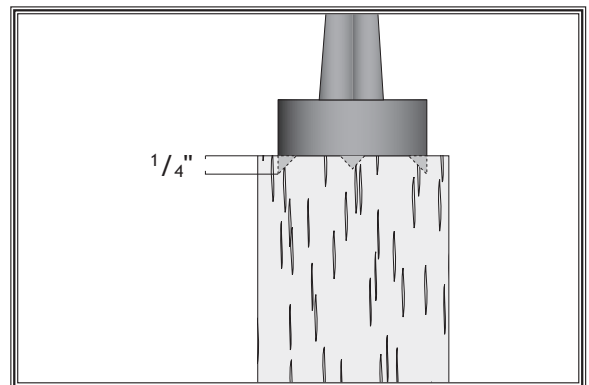


Figure 28. Spur center properly embedded.

8. Install the live center into the tailstock quill, and lock the quill in place with the quill locking lever (refer to **Installing Tailstock Center** on **Page 19** for instructions).
9. Slide the tailstock toward the workpiece until the point of the tailstock center touches the workpiece end center mark, then secure the tailstock in place with the tailstock locking lever.
10. Loosen the quill locking lever and rotate the quill handwheel clockwise to push the tailstock center into the workpiece at least $\frac{1}{4}$ ".
11. Position the tool rest approximately $\frac{1}{4}$ " away from the workpiece, and approximately $\frac{1}{8}$ " above the workpiece center line (see **Figure 29**).
12. Before turning the lathe **ON**, rotate the workpiece by hand to ensure that there is safe clearance on all sides.

Spindle Turning Safety Tips:

- When turning the lathe **ON**, stand away from the vertical path of the spinning workpiece until the lathe reaches full speed and you can verify that the lathe will not throw the workpiece.
- Use the slowest speed when starting the lathe.
- Select the right speed for the size of the workpiece you are turning:
 - Use the slower speeds for large workpieces of diameters of 4" and over, and for rough cutting.
 - Use the middle range speeds for workpiece diameters of 2-4".
 - Use the faster speeds for workpieces under 2", and for finish turning.
- Keep the turning tool on the tool rest the **ENTIRE** time that it is approaching the workpiece and it is in contact the workpiece.
- Learn the correct techniques for each tool you will use. If you are unsure about how to use the lathe tools, read books or magazines about lathe techniques, and seek training from experienced and knowledgeable lathe users.

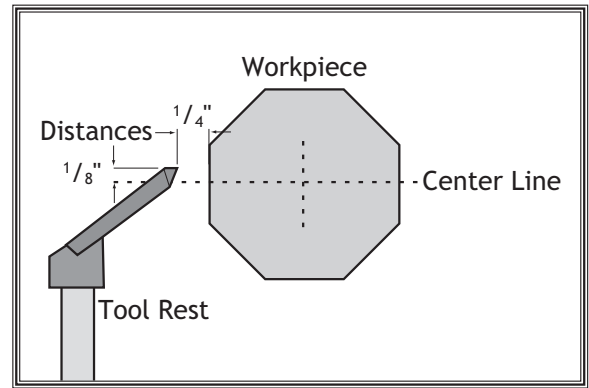


Figure 29. Relative position of tool rest to workpiece.

! WARNING

DO NOT press the workpiece too firmly with the tailstock center or the bearings will bind and over-heat. Likewise, **DO NOT** leave the workpiece too loose or the workpiece will spin off the lathe. Use good reason and care, otherwise, serious personal injury could result.

! CAUTION

Always keep the turning tool resting on the tool rest when preparing to make contact with the workpiece and when it is in contact with the workpiece. Otherwise, the spinning workpiece could force the tool towards you at a high rate of speed, or entangle your hands with the moving workpiece. Failure to heed this warning could result in serious personal injury.

Faceplate Turning

Faceplate turning is when a workpiece is mounted to the faceplate that, in turn, is secured to the headstock spindle. This type of turning is usually done with open-faced workpieces like bowls or plates (see **Figure 30**).

To mount the workpiece onto the faceplate, do these steps:

1. Mark the center of the workpiece back, as in **Spindle Turning on Page 22**.

Note: *Cut off the excess corners of the workpiece to make it as close to "round" as possible.*

2. Use the mark made from **Step 1** to center the faceplate on the workpiece back, and attach it with wood screws that do not have tapered heads (see **Figures 31 & 32**).
3. Thread and secure the faceplate onto the headstock spindle (refer to **Installing Faceplate on Page 20** for detailed instructions).

If wood screws cannot be placed in the workpiece, then the faceplate can be mounted to a backing block that is securely glued to the workpiece.

To mount your workpiece to a backing block, do these steps:

1. Make the backing block from a piece of scrap wood that is flat on both sides, and is free of knots and splits.
2. Locate and mark the center of both the workpiece and the backing block.
3. Drill a 1/4" hole completely through the backing block at its center.
4. Looking through the hole in the backing block to line it up with the center of the workpiece, glue and clamp the backing block to the workpiece.

Note: *Allow the glue joint to completely cure according to the manufacturer's instructions.*

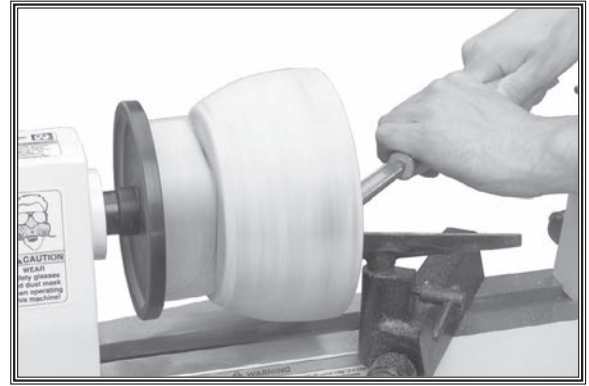


Figure 30. Typical faceplate turning operation.

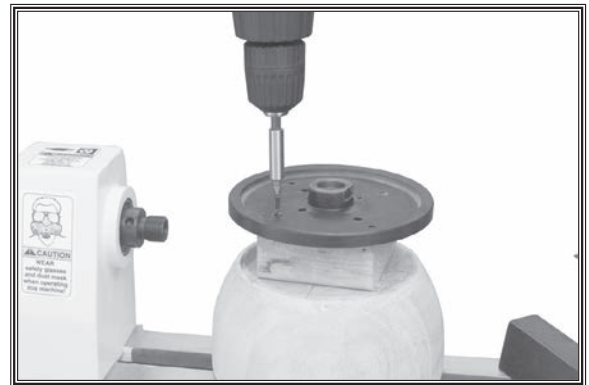


Figure 31. Typical attachment of faceplate to workpiece (shown with backing block).

OPERATIONS

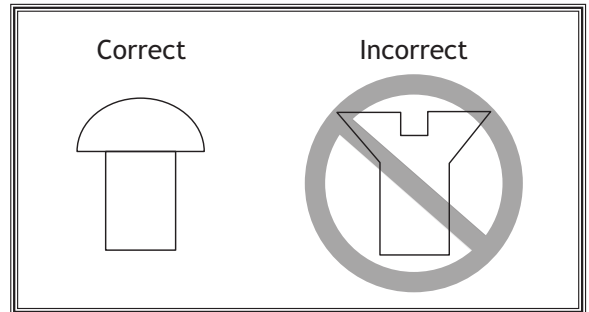


Figure 32. Correct and incorrect screw types for mounting faceplate to workpiece.

NOTICE

Only use tap screws or wood screws with non-tapered heads (see **Figure 32**) to attach the faceplate to the workpiece. **DO NOT** use drywall screws or screws with tapered heads because they can split the faceplate, or the screws may snap off during lathe operation.

Outboard Turning

Outboard turning is a variation of faceplate turning and is usually done when stock diameter is greater than 12". For the size of the Model W1758 and its minimum turning speed, we recommend not exceeding a maximum workpiece diameter of 17".

Figure 33 depicts the lathe setup at 90° and using the provided tool rest extension. Figure 34 shows the headstock setup for outboard turning at 180°.

It is important for safety and performance to use the provided tool rest extension in a manner that will offer the greatest stability and range for your turning tool. If this tool rest assembly will not work for your operation, you must use a free-standing tool rest (not supplied).

Sanding/Finishing Using the Lathe

The lathe can be used for finishing procedures after the turning operations are complete, such as sanding, polishing, and applying finishes by hand (see Figure 35).

Note: Whenever performing finishing procedures to your workpiece, remove the tool rest to avoid entanglement. Use the slowest speeds for safer control and better results.

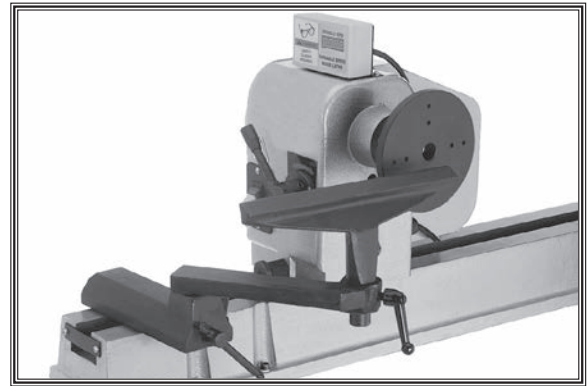


Figure 33. Headstock positioned outboard at 90°.

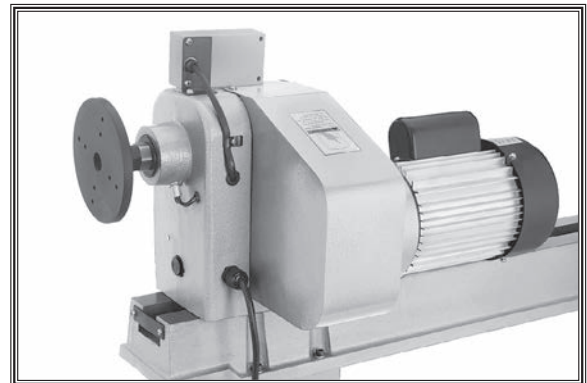


Figure 34. Headstock positioned outboard at 180°.

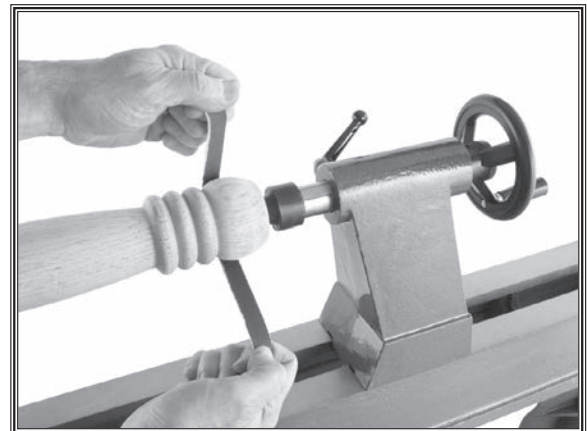


Figure 35. Typical sanding operation on a lathe.

	<p>⚠ CAUTION</p> <p>Wrapping sandpaper or other finishing materials completely around the workpiece could pull your hands into the spinning workpiece and cause personal injury. Never wrap anything completely around the spinning workpiece.</p>
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ACCESSORIES

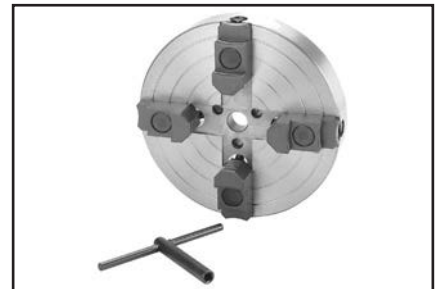
Wood Lathe Accessories

The following wood lathe accessories may be available through your local Woodstock International Inc. Dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: 1-800-545-8420 or at sales@woodstockint.com.

The **D1090 Steelex 3-Jaw Chuck for Wood Lathes** is a "must have" for the serious wood turner. This 3-jaw chuck is a self-centering style chuck used mostly for round work. All three jaws tighten together to aid in centering the workpiece. Jaws are reversible for expanded work holding capacity. *Threaded insert required for mounting, such as the D1098 Steelex 1" x 8 TPI RH threaded insert.*



The **D1089 Steelex 4-Jaw Chuck for Wood Lathes** is another "must have" for the serious wood turner. This 4-jaw chuck is an independent type chuck that is used for square and odd-shaped pieces. Each jaw tightens individually and can be turned around to hold larger dimension workpieces. *Threaded insert required for mounting, such as the D1098 Steelex 1" x 8 TPI RH threaded insert.*



The **D2304 Steelex Plus 6-Piece Deluxe Lathe Chisel Set** features beefy ash handles for unsurpassed control, brass ferrules, and high-speed steel blades. Includes: a 17" long $\frac{13}{16}$ " parting tool, $\frac{13}{16}$ " round nose, $\frac{3}{8}$ " gouge, 19" long 1" skew, $\frac{5}{8}$ " gouge, and a $22\frac{3}{4}$ " long $\frac{3}{8}$ " gouge. Comes in a beautiful red blow-molded carrying case.



The **D2250 Steelex 5-Piece Turning Chisel Set** is for those fine detail turning operations. This set features well balanced hardwood handles and high carbon steel cutting edges. Includes: a $\frac{1}{16}$ " radius gouge, $\frac{1}{8}$ " radius gouge, $\frac{3}{16}$ " parting tool, $\frac{1}{4}$ " spear point, and a $\frac{1}{4}$ " skew. All tools are $10\frac{1}{2}$ " overall in length.



MAINTENANCE

General

Regular periodic maintenance on your machine will ensure its optimum performance. Make a habit of inspecting your machine each time you use it.

Check for the following conditions and repair or replace when necessary:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Damaged V-belt.
- Any other condition that could hamper the safe operation of this machine.

Cleaning

Cleaning the Model W1758 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Remove any debris or oily substances from the inside of the spindle and quill.

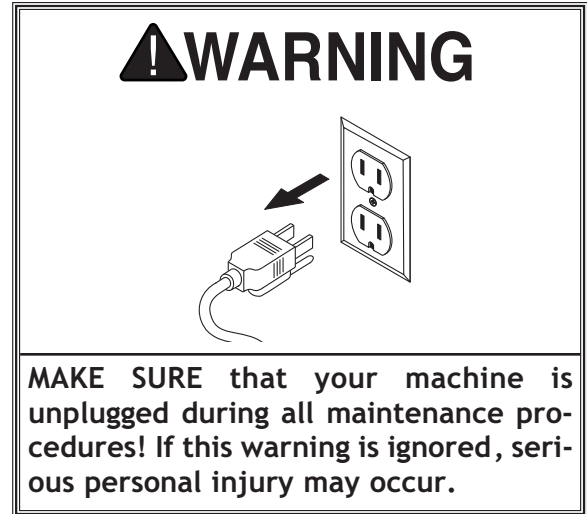
Lathe Bed

Protect the unpainted cast iron lathe bed by wiping it clean after every use—this ensures moisture from wood dust does not remain on the bare metal surfaces. Keep your lathe bed rust-free with regular applications of quality lubricants.

Tailstock

To disassemble the tailstock for cleaning, loosen the set screw above the handwheel, then completely unthread the handwheel from the threads of the quill. Except for the live center, thoroughly clean all of the unpainted parts with mineral spirits and apply a thin coat of light machine oil to these surfaces.

When re-assembling the tailstock, thread the handwheel back onto the quill, tighten down the set screw that secures it, then back the screw off one full turn so that the handwheel can freely rotate.



Lubrication

Since all bearings for the Model W1758 are sealed and permanently lubricated, simply leave them alone until they need to be replaced. Do not lubricate them.

Wipe a lightly oiled shop rag on the outside of the headstock spindle. DO NOT allow any oil to get on the inside mating surface of the spindle.

Use the quill handwheel to extend the tailstock quill all the way out, and apply a thin coat of white lithium grease to the outside of the quill. DO NOT allow any lubricant to get on the inside mating surface of the quill.

SERVICE

General

This section covers the most common service adjustments or procedures that may need to be made during the life of your machine.

If you require additional machine service not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: tech-support@shopfox.biz.

Aligning Headstock & Tailstock Centers

To ensure accurate and safe results, make sure that the headstock and tailstock centers are aligned before you begin your lathe operation.

To align the headstock and tailstock centers, do these steps:

1. DISCONNECT THE LATHE FROM POWER!
2. With the headstock and tailstock centers installed, slide the tailstock up to the headstock.
3. Loosen the headstock locking lever and swivel the headstock so that the tips of the centers touch, as illustrated in **Figure 36**, then lock the headstock securely in place.

Changing V-Belt

To change the V-belt, do these steps:

1. DISCONNECT THE LATHE FROM POWER!
2. Remove the belt safety cover from the back of the lathe.
3. Pull the motor pulley plates apart so that the V-belt will slip down to the motor arbor—this will loosen the V-belt tension (see **Figure 37**).
4. While keeping the tension off the V-belt, roll it off the spindle pulley and remove it.
5. Install the new V-belt by reversing **Steps 3-4**.

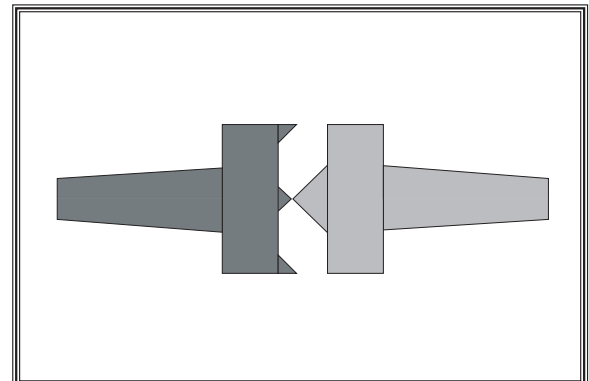
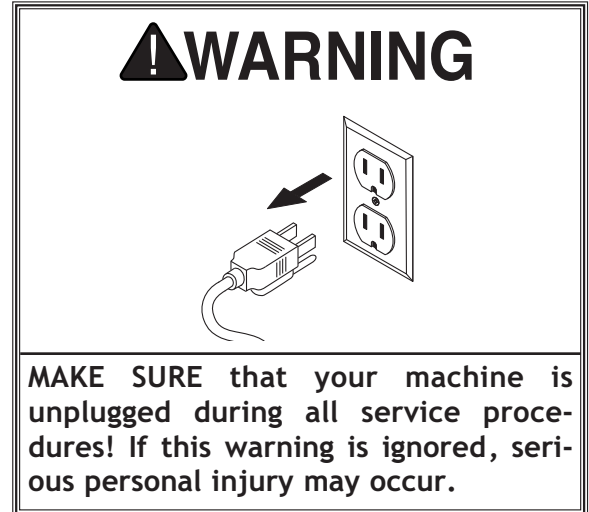


Figure 36. Center tips touching to ensure proper alignment.

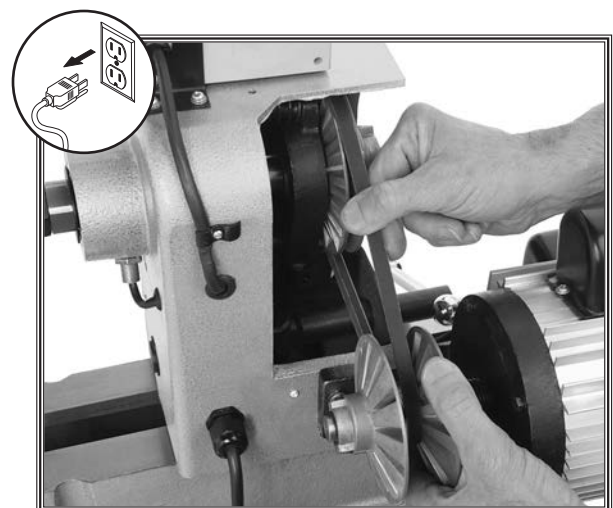
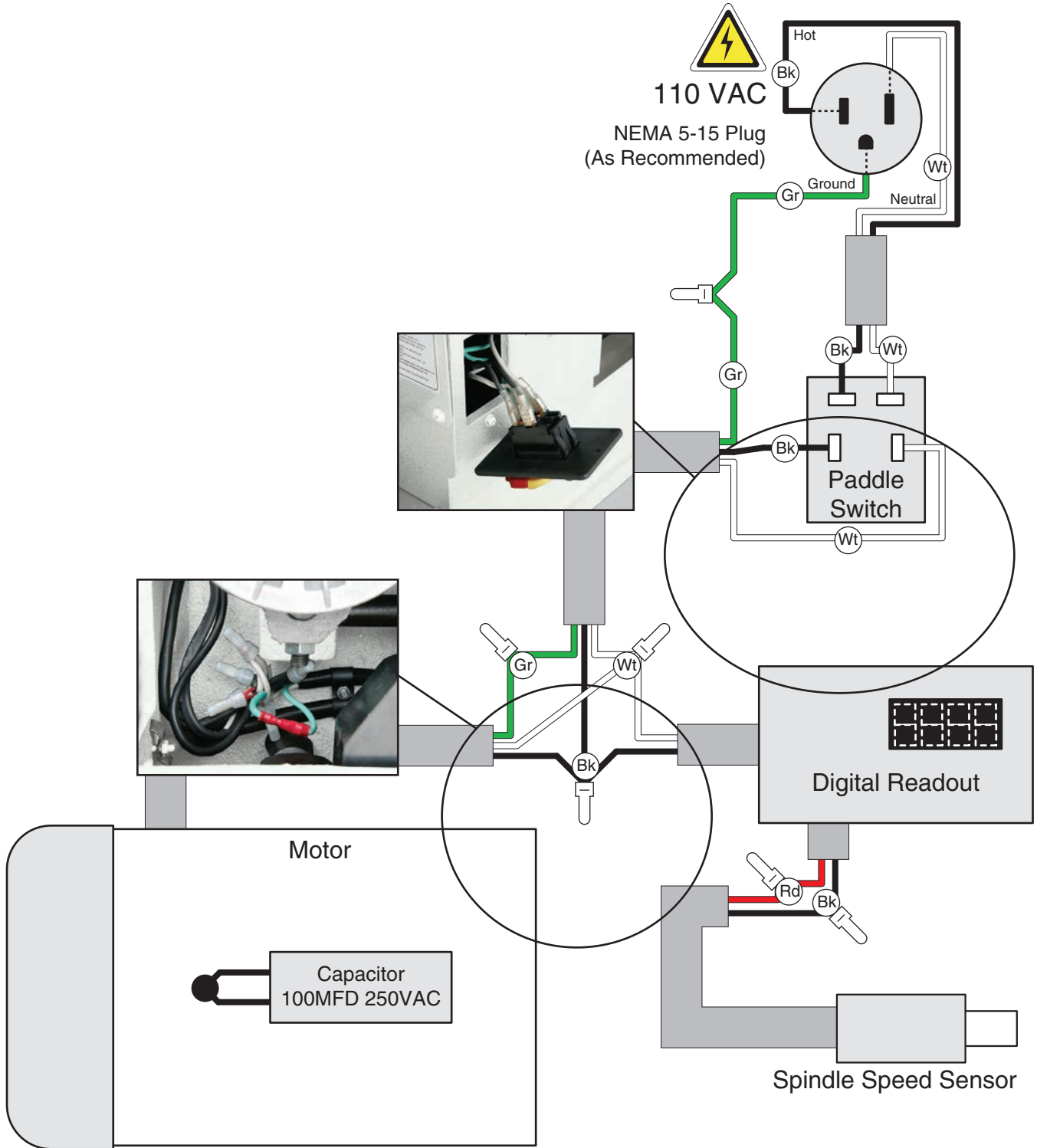


Figure 37. Changing the V-belt.

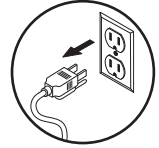
Electrical Components & Wiring Diagram



SERVICE

Troubleshooting

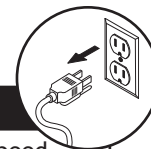
This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT** make any adjustments until power is disconnected and moving parts have come to a complete stop!



Motor & Electrical

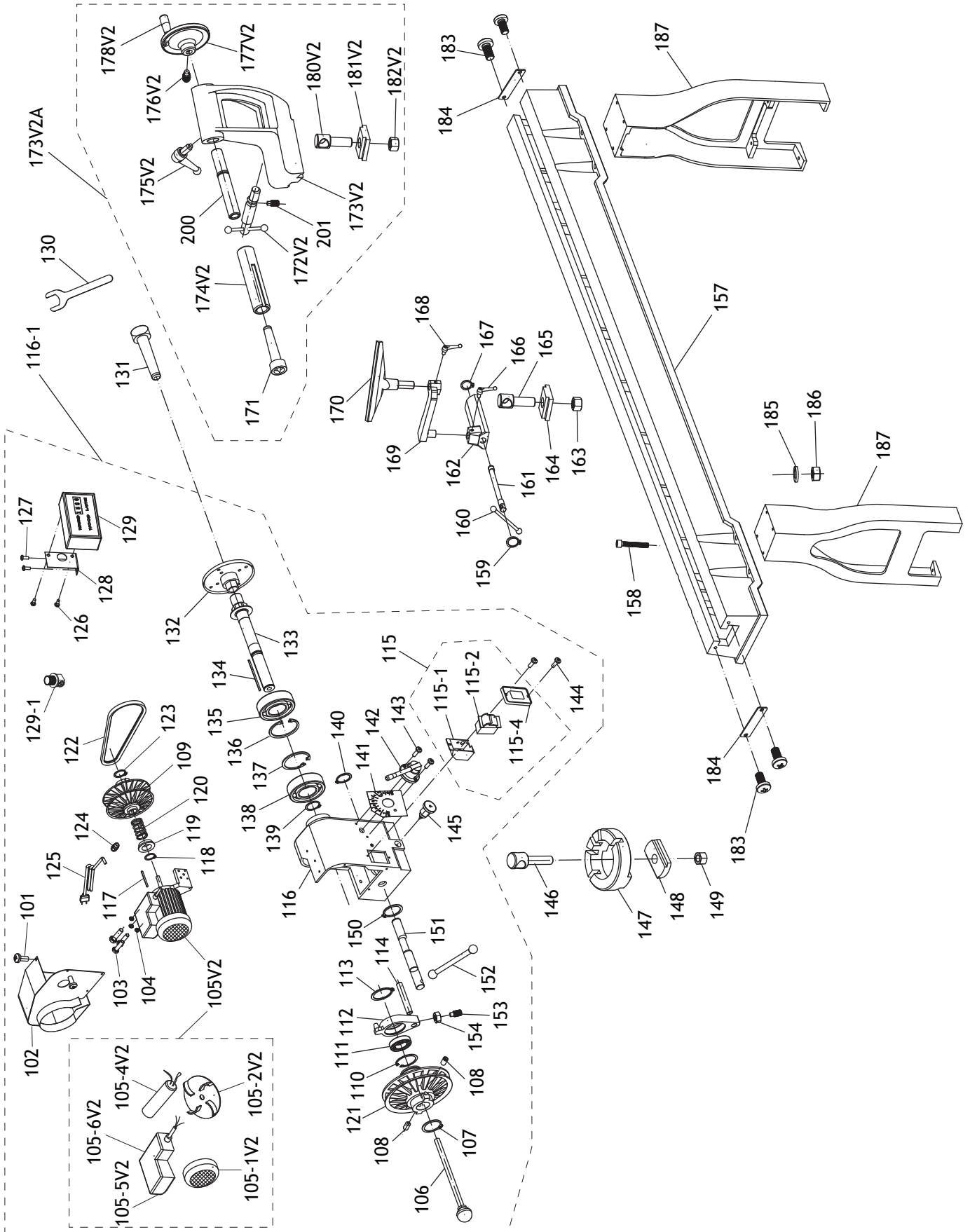
PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Lathe will not start, or it growls on start up.	<ol style="list-style-type: none"> 1. Power supply fuse or circuit breaker has tripped. 2. Motor fan cover is dented, stopping the fan from being able to spin. 3. Paddle switch is broken or faulty. 4. Start capacitor is at fault. 5. Motor is at fault. 	<ol style="list-style-type: none"> 1. Disconnect power, and inspect circuit for electrical shorts and repair. Replace circuit breaker if it is old or has tripped many times. 2. Replace or adjust fan cover; inspect motor fan and replace if damaged. 3. Disconnect power, and use an ohmmeter to check switch terminals for continuity, and replace switch if required. 4. Replace start capacitor. 5. Replace motor.
Fuses or circuit breakers trip open.	<ol style="list-style-type: none"> 1. Short circuit in line cord or plug. 2. Short circuit in motor or loose connections. 3. Incorrect fuses or circuit breakers in power supply. 	<ol style="list-style-type: none"> 1. Inspect cord or plug for damaged insulation and shorted wires, and replace extension cord. 2. Replace or adjust fan cover; inspect motor fan and replace if damaged. 3. Install correct fuses or circuit breakers.
Vibration noise while machine is running; noise changes when speed is changed.	<ol style="list-style-type: none"> 1. V-belt cover loose. 2. V-belt cover bent or dented and is making contact with motor pulley or V-belt. 3. Bad spindle bearing(s). 	<ol style="list-style-type: none"> 1. Tighten the four screws securing V-belt cover; if necessary, install a soft, vibration dampening material between V-belt cover and headstock. 2. Remove V-belt cover and inspect for dents, bends, or indications of rubbing. Tap out dents with rubber mallet, bend back into proper shape, or shim away from the motor pulley. 3. Replace spindle bearing(s).
Vibration noise while machine is running; noise remains constant when speed is changed.	<ol style="list-style-type: none"> 1. Dented motor fan cover. 2. Bad spindle bearing(s). 	<ol style="list-style-type: none"> 1. Replace or adjust fan cover; inspect motor fan and replace if damaged. 2. Replace spindle bearing(s).

Lathe Operation



PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Bad surface finish.	<ol style="list-style-type: none"> 1. Wrong spindle speed. 2. Dull chisel or wrong chisel being used for operation. 	<ol style="list-style-type: none"> 1. Use trail-and-error to find better spindle speed. 2. Sharpen chisel or try a different chisel.
Tailstock moves.	<ol style="list-style-type: none"> 1. Tailstock mounting bolt loose. 2. Bed surface is oily or greasy. 	<ol style="list-style-type: none"> 1. Tighten. 2. Clean bed surface to remove excess oil/grease.
Excessive vibration.	<ol style="list-style-type: none"> 1. Workpiece mounted incorrectly. 2. Workpiece warped, out of round, or is flawed. 3. Spindle speed is set too fast for mounted workpiece. 4. Lathe is resting on uneven surface. 5. Motor mounting bolts are loose. 6. V-belt is worn or damaged. 7. Spindle bearing(s) are worn. 	<ol style="list-style-type: none"> 1. Re-mount workpiece, making sure centers are aligned and are fully embedded in true center of workpiece. 2. Cut workpiece to correct, or use a different workpiece. 3. Reduce spindle speed. 4. Shim legs or adjust machine feet to ensure lathe is even and stable on the floor. 5. Tighten motor mounting bolts. 6. Replace V-belt (refer to Page 28). 7. Replace spindle bearing(s).
Chisels grab or dig into workpiece.	<ol style="list-style-type: none"> 1. Tool rest adjusted too low. 2. Tool rest set too far from workpiece. 3. Wrong chisel/tool being used. 4. Chisel/tool is dull. 	<ol style="list-style-type: none"> 1. Adjust tool rest higher (refer to Page 23). 2. Move tool rest closer to workpiece (refer to Page 23). 3. Use correct chisel/tool; educate yourself by reading books, trade magazines, or seeking help from an experienced lathe operator. 4. Sharpen or replace chisel/tool being used.
Inaccurate turning results from one end of the workpiece to the other.	<ol style="list-style-type: none"> 1. Headstock and tailstock are not properly aligned with one another. 	<ol style="list-style-type: none"> 1. Re-align headstock and tailstock to one another (refer to Page 28).
Cannot remove tapered tool from tailstock barrel.	<ol style="list-style-type: none"> 1. Tailstock quill not fully retracted into tailstock. 2. Debris or oily substance not removed from quill and tapered tool mating surfaces before installing. 	<ol style="list-style-type: none"> 1. Turn quill handwheel until it forces tapered tool out of quill. 2. Always make sure the mating surfaces of the quill and tapered tool are free from debris and oily substances.

PARTS



Parts List

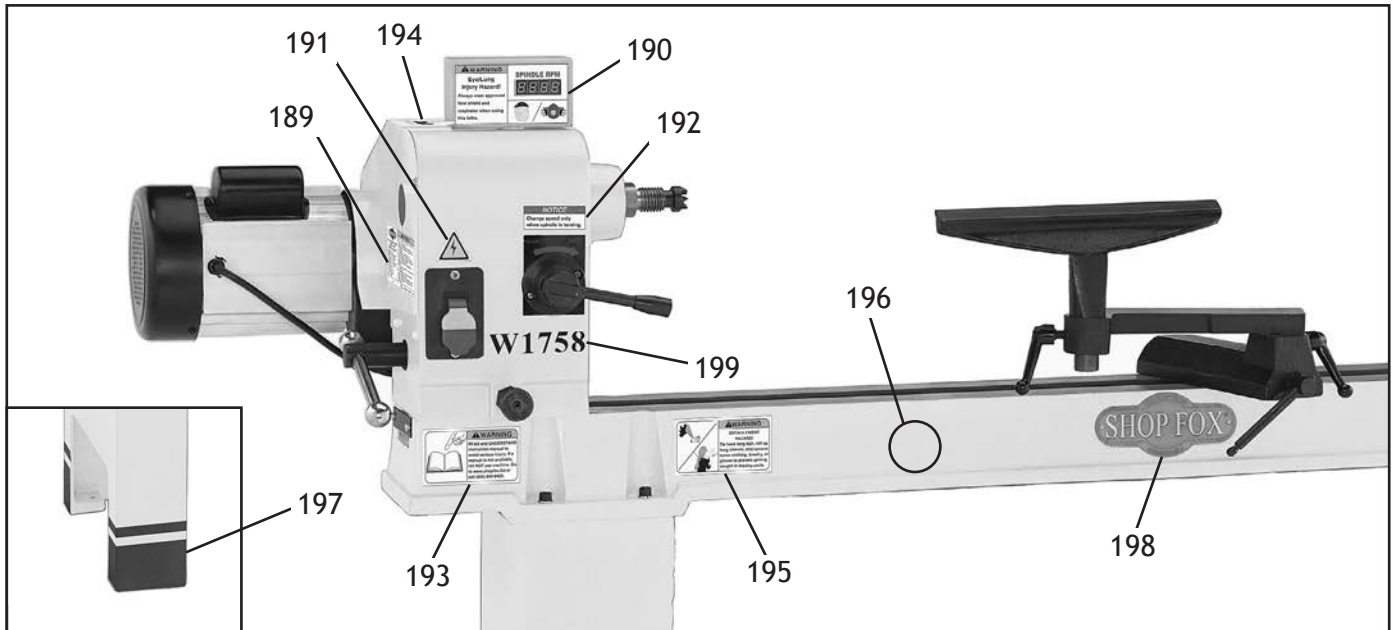
REF	PART #	DESCRIPTION
101	XPS05M	PHLP HD SCR M5-.8 x 8
102	X1758102	MOTOR COVER
103	XPB26M	HEX BOLT M8-1.25 X 30
104	XPLW04M	LOCK WASHER 8MM
105V2	X1758105V2	MOTOR 2HP 110V 60HZ V2.10.08
105-1V2	X1758105-1V2	MOTOR FAN COVER V2.10.08
105-2V2	X1758105-2V2	MOTOR FAN V2.10.08
105-4V2	X1758105-4V2	R CAPACITOR 100M 250V V2.10.08
105-5V2	X1758105-5V2	MOTOR JUNCTION BOX V2.10.08
105-6V2	X1758105-6V2	JUNCTION BOX COVER V2.10.08
106	X1758106	KNOCKOUT TOOL
107	XPR12M	EXT RETAINING RING 35MM
108	X1758108	CENTER-DRILLED SET SCR M6-1 X 10
109	X1758109	MOTOR PULLEY SET
110	XPR38M	INT RETAINING RING 62MM
111	XP6007ZZ	BALL BEARING 6007ZZ
112	X1758112	SHIFTING LEVER BRACKET
113	XPR12M	EXT RETAINING RING 35MM
114	X1758114	RACK
115	X1758115	SWITCH ASSEMBLY
115-1	X1758115-1	SWITCH BOX
115-2	D2751	PADDLE SWITCH W/KEY
115-4	X1758115-4	SWITCH BOX PLATE
116	X1758116	HEADSTOCK CASTING
116-1	X1758116-1	HEADSTOCK ASSEMBLY
117	XPK93M	KEY 4 X 4 X 80
118	XPR06M	EXT RETAINING RING 16MM
119	X1758119	MOTOR SHAFT SLEEVE
120	X1758120	COMPRESSION SPRING
121	X1758121	SPINDLE PULLEY SET
122	P0462022	V-BELT MX24.5, COGGED
123	XPR06M	EXT RETAINING RING 16MM
124	X1758124	STRAIN RELIEF M20-1.5
125	X1758125	POWER WIRE 16G 3W 5-15 PLUG
126	XPS68M	PHLP HD SCR M6-1 X 10
127	XPS68M	PHLP HD SCR M6-1 X 10
128	X1758128	DIGITAL READOUT BRACKET
129	X1758129	DIGITAL READOUT ASSEMBLY
129-1	X1758129-1	RPM SENSOR
130	X1758130	FLAT WRENCH 32MM
131	X1758131	SPUR CENTER MT#2
132	X1758132	FACEPLATE 6"
133V2	X1758133V2	SPINDLE 1 X 8 V2.10.17
134	XPK93M	KEY 4 X 4 X 80
135	XP6205ZZ	BALL BEARING 6205ZZ
136	XPR26M	INT RETAINING RING 52MM
137	XPR26M	INT RETAINING RING 52MM
138	XP6205ZZ	BALL BEARING 6205ZZ
139	XPR11M	EXT RETAINING RING 25MM

REF	PART #	DESCRIPTION
140	XPR58M	EXT RETAINING RING 24MM
141	X1758141	SPEED CHANGE LABEL
142	X1758142	SPEED CONTROL LEVER ASSY
143	XPS08M	PHLP HD SCR M5-.8 X 12
144	XPS02M	PHLP HD SCR M4-.7 X 12
145	X1758145	PIVOT LOCKING PIN
146	X1758146	HEADSTOCK PIVOT BOLT
147	X1758147	PIVOT BASE
148	X1758148	BED CLAMP PLATE
149	XPN29M	HEX NUT M18-2.5
150	XPR58M	EXT RETAINING RING 24MM
151	X1758151	HEADSTOCK ECCENTRIC SHAFT
152	X1758152	LEVER
153	XPSS21M	SET SCREW M8-1.25 X 25
154	XPNO3M	HEX NUT M8-1.25
157	X1758157	BED
158	XPCAP12M	CAP SCREW M8-1.25 X 40
159	XPR08M	EXT RETAINING RING 19MM
160	X1758161	BALL LEVER
161	X1758161	TOOL REST ECCENTRIC SHAFT
162	X1758162	TOOL REST BASE
163	XPN29M	HEX NUT M18-2.5
164	X1758164	TOOL REST CLAMP PLATE
165	X1758165	TOOL REST PIVOT BOLT
166	X1758166	LOCK HANDLE ASSY M10-1.5 X 15
167	XPR08M	EXT RETAINING RING 19MM
168	X1758166	LOCK HANDLE ASSY M10-1.5 X 15
169	X1758169	TOOL REST EXTENSION ARM
170	X1758170	TOOL REST
171	X1758171	TAILSTOCK LIVE CENTER MT#2
172V2	X1758172V2	TAILSTOCK LOCK LEVER V2.04.10
173V2A	X1758173V2A	TAILSTOCK ASSEMBLY V2.04.10
173V2	X1758173V2	TAILSTOCK CASTING V2.04.10
174V2	X1758174V2	TAILSTOCK QUILL V2.04.10
175V2	X1758175V2	QUILL LOCK HANDLE ASSY V2.04.10
176V2	X1758176V2	HANDWHEEL SET SCREW V2.04.10
177V2	X1758177V2	TAILSTOCK HANDWHEEL V2.04.10
178V2	X1758178V2	HANDWHEEL HANDLE V2.04.10
180V2	X1758180V2	TAILSTOCK PIVOT BOLT V2.04.10
181V2	X1758181V2	TAILSTOCK CLAMP PLATE V2.04.10
182V2	XPN29M	HEX NUT M18-2.5
183	XPS08M	PHLP HD SCR M5-.8 X 12
184	X1758184	BED END PLATE
185	XPLW04M	LOCK WASHER 8MM
186	XPNO3M	HEX NUT M8-1.25
187	X1758187	STAND LEG
200	X1758200	TAILSTOCK LEADSCREW V2.04.10
201	XPSS04M	SET SCREW M6-1 X 12

Label Placement

⚠️ WARNING

Safety labels warn about machine hazards and how to prevent machine damage or injury. The owner of this machine **MUST** maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, **REPLACE** that label before allowing the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or www.shopfoxtools.com to order new labels.



REF	PART #	DESCRIPTION
189	X1758189	MACHINE ID LABEL
190	X1758190	DIGITAL READOUT LABEL
191	X1758191	ELECTRICITY LABEL
192	X1758192	SPEED CHANGE NOTICE LABEL
193	X1758193	READ MANUAL LABEL
194	X1758194	DISCONNECT POWER LABEL

REF	PART #	DESCRIPTION
195	X1758195	ENTANGLEMENT WARNING LABEL
196	XPPAINT-1	SHOP FOX WHITE TOUCH-UP PAINT
197	X1758197	BLACK PIN STRIPE LABEL
198	X1758198	SHOP FOX NAMEPLATE
199	X1758199	MODEL NUMBER LABEL



Warranty Registration

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____ Invoice # _____
 Model # _____ Serial # _____ Dealer Name _____ Purchase Date _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

- How did you learn about us?

<input type="checkbox"/> Advertisement	<input type="checkbox"/> Friend	<input type="checkbox"/> Local Store
<input type="checkbox"/> Mail Order Catalog	<input type="checkbox"/> Website	<input type="checkbox"/> Other:
- How long have you been a woodworker/metalworker?

<input type="checkbox"/> 0-2 Years	<input type="checkbox"/> 2-8 Years	<input type="checkbox"/> 8-20 Years	<input type="checkbox"/> 20+ Years
------------------------------------	------------------------------------	-------------------------------------	------------------------------------
- How many of your machines or tools are Shop Fox?

<input type="checkbox"/> 0-2	<input type="checkbox"/> 3-5	<input type="checkbox"/> 6-9	<input type="checkbox"/> 10+
------------------------------	------------------------------	------------------------------	------------------------------
- Do you think your machine represents a good value? Yes No
- Would you recommend Shop Fox products to a friend? Yes No
- What is your age group?

<input type="checkbox"/> 20-29	<input type="checkbox"/> 30-39	<input type="checkbox"/> 40-49
<input type="checkbox"/> 50-59	<input type="checkbox"/> 60-69	<input type="checkbox"/> 70+
- What is your annual household income?

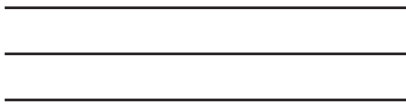
<input type="checkbox"/> \$20,000-\$29,000	<input type="checkbox"/> \$30,000-\$39,000	<input type="checkbox"/> \$40,000-\$49,000
<input type="checkbox"/> \$50,000-\$59,000	<input type="checkbox"/> \$60,000-\$69,000	<input type="checkbox"/> \$70,000+
- Which of the following magazines do you subscribe to?

<input type="checkbox"/> Cabinet Maker	<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Today's Homeowner
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wood
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Handy	<input type="checkbox"/> Practical Homeowner	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Live Steam	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Modeltec	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Shotgun News	

9. Comments: _____

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Woodstock International, Inc. will repair or replace, at its expense and at its option, the Shop Fox machine or machine part which in normal use has proven to be defective, provided that the original owner returns the product prepaid to a Shop Fox factory service center with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that Shop Fox machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

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