



KING CANADA

10" X 16" WOOD LATHE



MODEL: KWL-1016C

INSTRUCTION MANUAL

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IMPORTANT INFORMATION



2-YEAR
LIMITED WARRANTY
FOR THIS WOOD LATHE

KING CANADA TOOLS
OFFERS A 2-YEAR LIMITED WARRANTY
FOR NON-COMMERCIAL USE.

PROOF OF PURCHASE

Please keep your dated proof of purchase for warranty and servicing purposes.

REPLACEMENT PARTS

Replacement parts for this tool are available at our authorized KING CANADA service centers across Canada. For servicing, contact or return to the retailer where you purchased your product along with your proof of purchase.

LIMITED TOOL WARRANTY

KING CANADA makes every effort to ensure that this product meets high quality and durability standards. KING CANADA warrants to the original retail consumer a 2-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations and lack of maintenance. KING CANADA shall in no event be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products. To take advantage of this warranty, the product or part must be returned for examination by the retailer. Shipping and handling charges may apply. If a defect is found, KING CANADA will either repair or replace the product.

PARTS DIAGRAM & PARTS LISTS

Refer to the Parts section of the King Canada web site for the most updated parts diagram and parts list.



GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

- 1. KNOW YOUR TOOL**
Read and understand the owners manual and labels affixed to the tool. Learn its application and limitations as well as its specific potential hazards.
- 2. GROUND THE TOOL.**
This tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. **NEVER** connect the green wire to a live terminal.
- 3. KEEP GUARDS IN PLACE.**
Keep in good working order, properly adjusted and aligned.
- 4. REMOVE ADJUSTING KEYS AND WRENCHES.**
Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 5. KEEP WORK AREA CLEAN.**
Cluttered areas and benches invite accidents. Make sure the floor is clean and not slippery due to wax and sawdust build-up.
- 6. AVOID DANGEROUS ENVIRONMENT.**
Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lit and provide adequate surrounding work space.
- 7. KEEP CHILDREN AWAY.**
All visitors should be kept a safe distance from work area.
- 8. MAKE WORKSHOP CHILD-PROOF.**
-with padlocks, master switches or by removing starter keys.
- 9. USE PROPER SPEED.**
A tool will do a better and safer job when operated at the proper speed.
- 10. USE RIGHT TOOL.**
Don't force the tool or the attachment to do a job for which it was not designed.
- 11. WEAR PROPER APPAREL.**
Do not wear loose clothing, gloves, neckties or jewelry (rings, watch) because they could get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll up long sleeves above the elbows.
- 12. ALWAYS WEAR SAFETY GLASSES.**
Always wear safety glasses (ANSI Z87.1). Everyday eyeglasses only have impact resistant lenses, they are **NOT** safety glasses. Also use a face or dust mask if cutting operation is dusty.
- 13. DON'T OVERREACH.**
Keep proper footing and balance at all times.
- 14. MAINTAIN TOOL WITH CARE.**
Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 15. DISCONNECT TOOLS.**
Before servicing, when changing accessories or attachments.
- 16. AVOID ACCIDENTAL STARTING.**
Make sure the switch is in the "OFF" position before plugging in.
- 17. USE RECOMMENDED ACCESSORIES.**
Consult the manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.
- 18. NEVER STAND ON TOOL.**
Serious injury could occur if the tool tips over. Do not store materials such that it is necessary to stand on the tool to reach them.
- 19. CHECK DAMAGED PARTS.**
Before further use of the tool, a guard or other parts that are damaged should be carefully checked to ensure that they will operate properly and perform their intended function. Check for alignment of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other parts that are damaged should be properly repaired or replaced.
- 20. NEVER LEAVE MACHINE RUNNING UNATTENDED.**
Turn power "OFF". Don't leave any tool running until it comes to a complete stop.

SPECIFIC SAFETY INSTRUCTIONS FOR YOUR WOOD LATHE

- 1. READ AND UNDERSTAND MANUAL BEFORE OPERATING.**
- 2. MAKE ALL ADJUSTMENTS** with the power OFF.
- 3.** Always wear eye protection.
- 4.** Do not wear gloves, neckties, jewelry or loose clothing.
- 5.** Tighten all lock knobs before operating.
- 6.** Rotate workpiece by hand before turning on power to ensure it clears the tool rest.
- 7.** Rough out workpiece before installing on faceplate.
- 8.** Do not mount split workpiece or one containing knot.
- 9.** Use lowest speed when starting a new workpiece.
- 10. Do not allow the turning tool to "bite"** into the workpiece. Always position the tool rest above the centerline of the lathe for spindle turning. Do not apply the turning tool to the workpiece below the level of the tool rest.
- 11. Avoid awkward hand positions** where a slip could cause a hand to move into the workpiece.
- 12. Keep a firm hold and control of the turning tool** at all times. Special cautions must be exercised when knots or voids are exposed to the turning tool.

GETTING TO KNOW YOUR WOOD LATHE



KWL-1016C SPECIFICATIONS

VOLTAGE	120V
HORSEPOWER	1/2 HP
AMPS6A
MOTOR R.P.M.....	1720
HZ60
PHASE	1
SWING OVER BED.....	10"
SWING OVER BASE	7-1/2"
DISTANCE BETWEEN CENTERS	16"
SPINDLE SIZE AND THREAD	1" X 8 TPI
SPINDLE SPEEDS	6 (480, 1270, 1960, 2730, 3327, 4023 RPM)
HEADSTOCK & TAILSTOCK TAPERMT#2

GETTING TO KNOW YOUR WOOD LATHE (Fig.1)

1. Spindle handwheel
2. Pulley safety cover
3. Headstock
4. Spindle
5. 3" Faceplate
6. Spur center
7. Tool rest lock knob
8. Tool rest
9. Tool rest base
10. Tool rest base lock lever
11. Bed
12. Tailstock lock lever
13. Live center
14. Tailstock quill
15. Quill lock handle
16. Tailstock
17. Tailstock handwheel
18. Mounting holes for optional Extension Bed EXT-1016
19. On/Off switch
20. Motor
21. Tension lever
22. Height adjustable rubber feet
23. Tension lock knob
24. Pulley cover lock handle

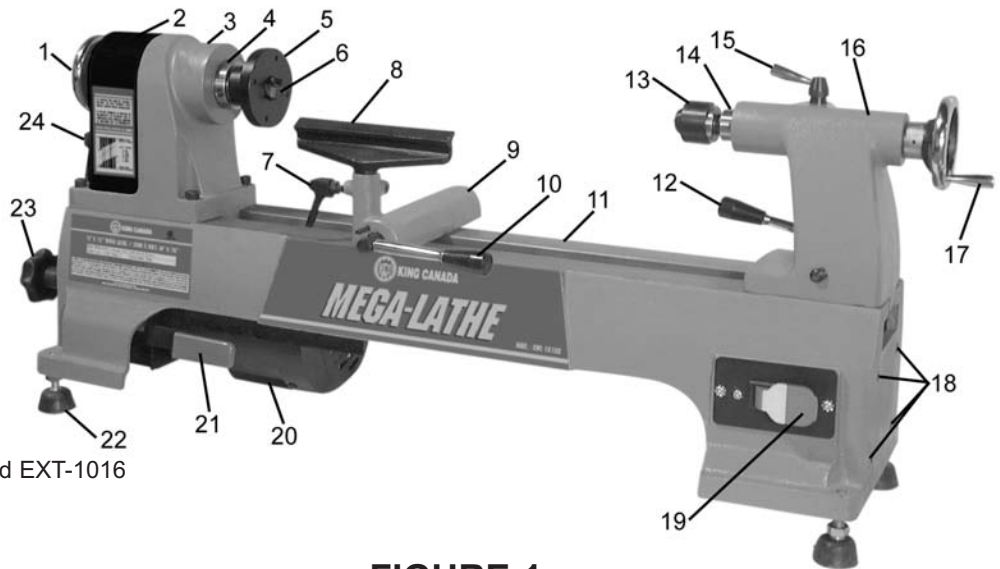


FIGURE 1

King Optional Accessories

Model	Description
EXT-1016	Bed Extension (Fig.2)
KW-006	6"- 3jaw chuck w/key
KW-007	6"- 4jaw chuck w/key
K-3163	1" x 8 TPI Chuck Insert

Note: K-3163 is needed to fit KW-006 or KW-007 onto inside spindle.

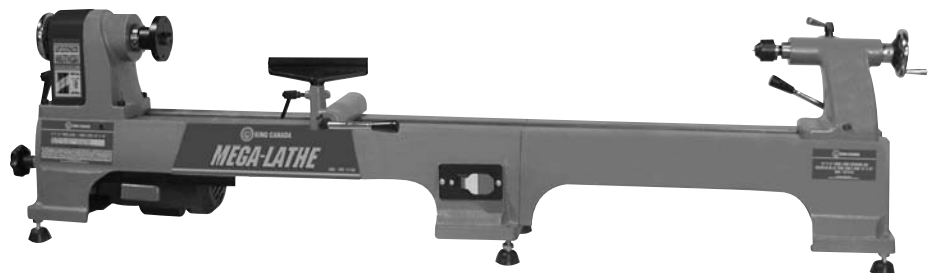


FIGURE 2

SETTING-UP YOUR WOOD LATHE

Your wood lathe should be mounted onto a stable and level workbench in a workshop with ample light to work in. Once the wood lathe is set-up on your workbench, it is now time to set your lathe level to your workbench. Place a level on the bed and adjust the corner rubber feet until the wood lathe is perfectly level with your workbench, once the rubber feet are adjusted, make sure to tighten nuts. If you prefer, fix the wood lathe permanently to the workbench by removing the 4 corner rubber feet and then using bolts and nuts instead (not supplied). Very little assembly is required, only knobs and/or handles and centers need to be assembled to the lathe (see #'s 6, 7, 13, 15, 17 Fig.1).



ELECTRICAL CONNECTIONS PLUGGING IN & TURNING ON/OFF

WARNING!

ALL ELECTRICAL CONNECTIONS MUST BE DONE BY A QUALIFIED ELECTRICIAN. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY! ALL ADJUSTMENTS OR REPAIRS MUST BE DONE WITH THE MACHINE DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY!

POWER SUPPLY

WARNING: YOUR WOOD LATHE MUST BE CONNECTED TO A 120V, 15-AMP, BRANCH CIRCUIT. FAILURE TO CONNECT IN THIS WAY CAN RESULT IN INJURY FROM SHOCK OR FIRE.

Your wood lathe must be properly grounded. Not all outlets are properly grounded. If you are not sure if your outlet is properly grounded, have it checked by a qualified electrician.

WARNING: IF NOT PROPERLY GROUNDED, THIS WOOD LATHE CAN CAUSE ELECTRICAL SHOCK, PARTICULARLY WHEN USED IN DAMP LOCATIONS. TO AVOID SHOCK OR FIRE, IF THE POWER CORD IS WORN OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.

GROUNDING

This wood lathe must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current, to reduce the risk of electric shock. This drill press is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING: TO MAINTAIN PROPER GROUNDING OF YOUR WOOD LATHE, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

120V OPERATION

As received from the factory, your wood lathe is ready to run for 120V operation and is intended for use on a circuit that has an outlet and a plug which looks like the one illustrated in Fig.3.

WARNING: DO NOT USE A TWO-PRONG ADAPTOR FOR THEY ARE NOT IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES. NEVER USE IN CANADA.

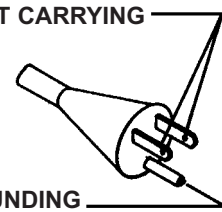
EXTENSION CORDS

The use of any extension cord will cause some loss of power. Use the following table to determine the minimum wire size (A.W.G-American Wire Gauge) extension cord. Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-hole receptacles which accept the tool's plug.

For circuits that are further away from the electrical circuit box, the wire size must be increased proportionately in order to deliver ample voltage to the motor. Refer to Fig. 4 for wire length and size.

PROPERLY GROUNDED OUTLET

CURRENT CARRYING PRONGS



GROUNDING PRONG

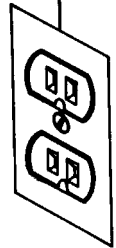


FIGURE 3

<u>LENGTH OF CONDUCTOR</u>	<u>WIRE SIZES REQUIRED (AMERICAN WIRE GAUGE)</u>
	<u>120V LINES</u>
0-25 FEET	NO.16
26-50 FEET	NO.14
51-100 FEET	NO.12

FIGURE 4

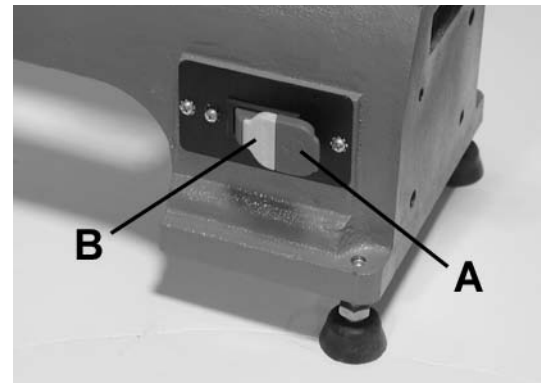


FIGURE 5

ON/OFF SWITCH

Warning! Make sure the switch is in the "OFF" position before plugging into a wall outlet.

Your wood lathe comes with a safety switch (A) with removeable key (B) Fig.5 to prevent unauthorized use. To start the lathe, first make sure the key is in place and then pull the switch out. To stop the lathe, push the switch in. Remove the key and store in a safe place until the next use.

ADJUSTMENTS & OPERATION



MOUNTING 3" FACEPLATE

Warning! Unplug wood lathe before attempting to mount or remove faceplate.

Your wood lathe comes with a standard 3" faceplate (A) Fig.6. This faceplate allows you to fasten your workpiece to the spindle when it is impossible to fix the workpiece inbetween two centers.



FIGURE 6

MOUNTING AND REMOVING CENTERS FROM HEADSTOCK AND TAILSTOCK

Warning! Unplug wood lathe before attempting to mount or remove any center.

The spur center (A) Fig.7 supplied with your wood lathe is designed to be fitted into the tapered headstock spindle (B). The spur center can be fitted by hand but first make sure the spur center shank and spindle hole are perfectly clean. It is recommended to use a solvent and a clean cloth to clean the shank and spindle hole.

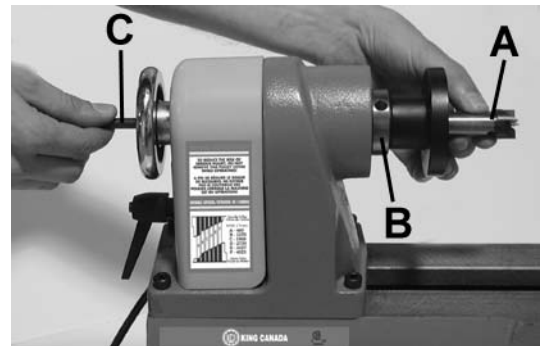


FIGURE 7

To remove the spur center from the headstock spindle, a knock-out bar (C) is supplied for this purpose. Insert the knock out bar through the outboard side of the spindle as shown and knock out the spur center. Hold the spur center before knocking it out to prevent it from dropping.

The live center (A) Fig.8 supplied with your wood lathe is designed to be fitted into the tapered tailstock quill (B). The live center can be fitted by hand but first make sure the live center shank and quill hole are perfectly clean. It is recommended to use a solvent and a clean cloth to clean the shank and spindle hole.

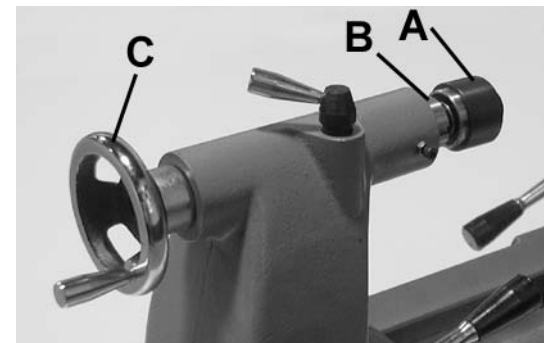


FIGURE 8

To remove the live center from the tailstock quill, simply retract the tailstock quill using handwheel (C) until the live center becomes free. Hold the live center before attempting to remove it to prevent it from dropping.

TOOL REST BASE AND TOOL REST ADJUSTMENTS

The tool rest base (A) Fig.9 and the tool rest (B) can be moved along the lathe bedway to any desired position between the centers. To move the tool rest base, lift locking lever (C) and slide the tool rest base. Once in position lower the locking lever to lock the tool rest base in place.

Now that the tool rest base is in proper position, the tool rest height must be adjusted. The top edge of the tool rest should be adjusted to 1/8" above the mid-point of both centers. To adjust the height, loosen lock handle (D). Raise or lower the tool rest to the mid-point of both centers and retighten lock handle. The tool rest base includes 2 threaded holes, one on each side, which allows the operator to choose which side is more convenient to install the lock handle (D) and avoids hand obstruction during certain turning operations.

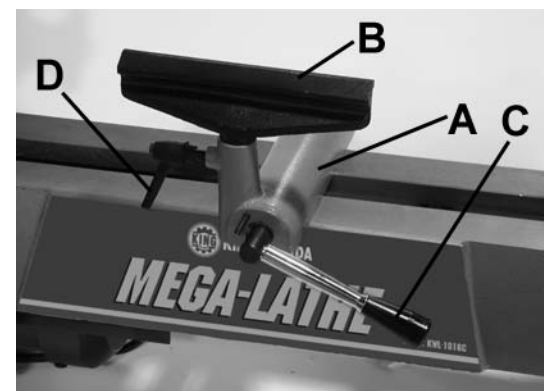


FIGURE 9



ADJUSTMENTS & OPERATION

TAILSTOCK ADJUSTMENTS

Before moving tailstock, make sure the bedway has been lubricated with paste wax or Spray Coat Dry film lubricant (King accessory model: KM-040).

The tailstock (A) Fig.10 is moved along the lathe bedway to support the other end of your workpiece using a live center (B). To move the tailstock, lift locking lever (C) and slide tailstock. Lower locking lever to lock in place. The tailstock quill (D) moves in and out by turning handwheel (E) and is locked into place using lock handle (F).

SPINDLE SPEED ADJUSTMENT

Warning! Unplug the wood lathe from its power source before changing spindle speed.

Your wood lathe provides 6 spindle speeds (480, 1270, 1960, 2730, 3327, 4023 RPM). The speed selection is determined by the type of operation. For small diameter workpieces, a high spindle speed is recommended.

To change the spindle speed, loosen safety cover lock handle (A) Fig.11. This will allow you to lift and remove safety cover (B) to gain access to the pulleys and belt.

Next the belt tension must be released in order to change the belt positioning on the pulley steps. Loosen tension lock knob (C) and swing the side cover (D) over to gain access to the motor pulley. Lift tension lever (E) to release belt tension. Now you are ready to change the belt positioning in order to change the spindle speed. Select the desired speed and notice the required belt positioning as shown in the pulley safety cover (B) label. Shift the belt to its new position around the spindle pulley and motor pulley, turning the spindle handwheel to shift the belt position will make the task easier.

Retension the belt by applying upward pressure on the tension lever, reposition side cover and tighten tension lock knob. Replace the pulley safety cover and secure with lock handle.

WOOD LATHE OPERATIONS

For information on wood lathe operations such as spindle turning, faceplate turning, various cutting and shaping technics, consult some of the many sources at your local library or book store. We recommend having an experienced woodworker show you basic tips to get started.

MAINTAINING YOUR WOOD LATHE

Warning! Unplug power cord from power source before making any maintenance to your wood lathe.

There are a few simply ways of maintaining your wood lathe to ensure long life.

- 1) After any operation, remove all wood chips found on the bed and thoroughly clean the wood lathe.
- 2) Lubricate all sliding surfaces regularly.
- 3) It is strongly recommended to keep the motor free of saw dust. An accumulation could block motor ventilation and could cause motor damage.

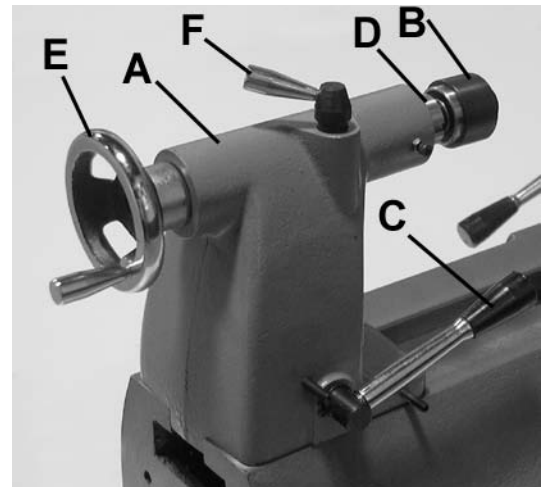


FIGURE 10

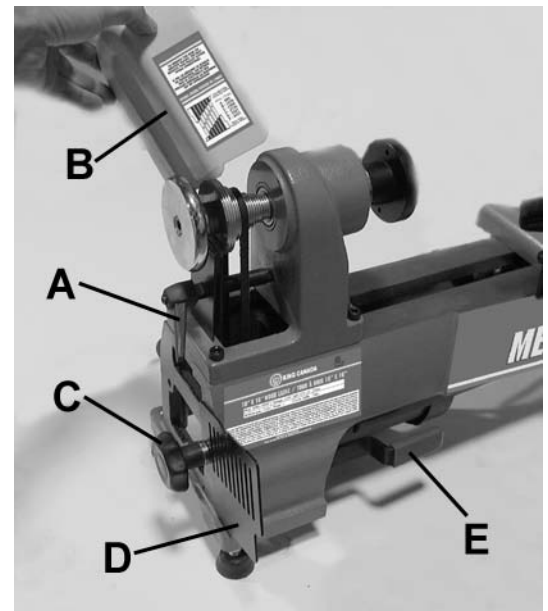


FIGURE 11