



Instruction Manual For Baldor Polishing Lathes

SAFETY NOTICE:

WARNING statements describe conditions that may lead to personnel injury including potentially fatal injuries if the machine is not properly used and warnings are not properly followed.

Caution statements describe conditions that may lead to equipment damage.

Electrical shock can cause serious or fatal injury. Only qualified personnel should install, maintain or troubleshoot this equipment.

- WARNING:** Do not operate this polishing lathe until you are sure that you are completely familiar with the safe operation of the polishing lathe, all accessories and safety equipment. Improper use can lead to severe injury. This manual defines proper use of this equipment. Before using this equipment for any other use, please consult Baldor. Contact Baldor if you do not understand any procedure or operation concerning this polishing lathe or this manual.
- WARNING:** Prevent electrical shock hazard and accidental machine operation. Always disconnect polishing lathe from the power source before servicing, changing accessories (such as wheels, tool rest, spark arrestor, etc.) or before performing maintenance.
- WARNING:** Use a holder when practical. It's safer than using your hand and it keeps hands away from wheel. Always keep hands at least 2 inches from wheels.
- WARNING:** Avoid accidental starting. Make sure switch is in "OFF" position before connecting to power source.
- WARNING:** Be sure the system is properly grounded before applying power. Do not apply power before you ensure that grounds are connected. Electrical shock can cause serious or fatal injury. Follow the National Electrical Code (NEC) and local codes for the safe installation of this equipment.
- WARNING:** Always use safety glasses with side shields (or full face shield) when operating the polishing lathe. Do not use ordinary eyeglasses. Also use face or dust mask if cutting operation is dusty.
- WARNING:** Unsuitable accessories or attachments added to this machine can create hazards. Baldor accessories are specifically designed to be used with this polishing lathe. Use accessories or attachments only in the proper intended manner. Accessories or attachments obtained from another source may cause hazards. Consult the manufacturer before use.
- WARNING:** Remove adjusting keys and wrenches from this product after use. Check to see that keys and adjusting wrenches are removed from polishing lathe before turning it on. Projectiles can cause severe injury to yourself or others.
- WARNING:** Don't use in dangerous environment. Don't use polishing lathes in damp or wet locations, or expose them to rain. Electrical shock can cause serious or fatal injury. Follow the National Electrical Code (NEC) and local codes for the safe installation of this equipment.
- WARNING:** Do not wear loose clothing, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- WARNING:** Secure work. Use clamps to secure the work piece when practical. It's safer than using your hand and it keeps hands away from wheel.
- WARNING:** When starting the polishing lathe for the first time, or after installing a replacement wheel, it is most important that the operator stand aside for at least one minute of rotation at full speed. This is the correct practice since wheels can disintegrate if they have received damage during shipping or handling.
- WARNING:** Check damaged parts. Before further use of the polishing lathe, a guard or other part that is damaged should be carefully checked to assure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

SAFETY NOTICE Continued

- WARNING:** Never install a wheel that is damaged, such as a chip or crack on any surface. A damaged wheel can disintegrate while rotating at a high RPM or when work is placed against the wheel. This can severely harm the operator or others in the area.
- WARNING:** Keep work area clean and well lit. Clutter and poor lighting invites accidents.
- WARNING:** Use proper extension cord. Make sure your extension cord is in good condition. When using an extension cord, be sure it is rated for the voltage and current rating of your product. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct wire size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the AWG gauge number, the heavier the cord.
- WARNING:** Don't over reach. Keep proper footing and balance at all times. A rotating wheel can catch an article of clothing and cause personnel injury.
- WARNING:** Dust created during polishing, grinding, sawing, power sanding, drilling, and other activities may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
- WARNING:** Keep children and visitors away. Remove starter keys turn off master switches. Padlock equipment or work area when not in use.
- WARNING:** Never leave polishing lathe running unattended. Always turn power off after use.
- Caution:** Don't force polishing lathe. It will do the job better and safer at the feed rate for which it was designed.
- Caution:** Use right tool. Don't force tool or attachment to do a job for which it was not designed.
- Caution:** Maintain polishing lathe with care. Keep polishing lathe clean for best and safest performance.

Always use safety glasses with side shields (or full face shield) when operating the polishing lathe. Do not use ordinary eyeglasses. Also use face or dust mask if cutting operation is dusty.

Unsuitable accessories or attachments added to this polishing lathe may introduce hazards. Baldor accessories and attachments are specifically designed to be used with the polishing lathe. Accessories or attachments obtained from another source may cause hazards. Consult the manufacturer before use.

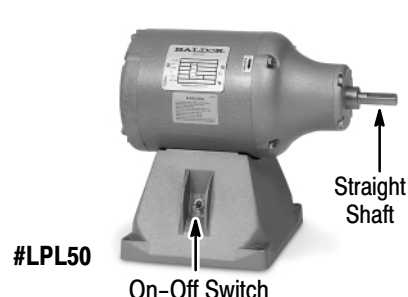
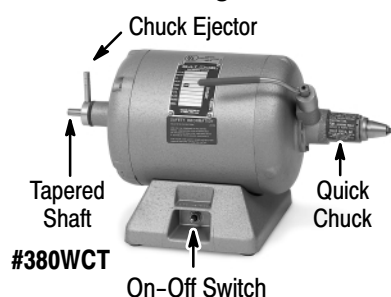
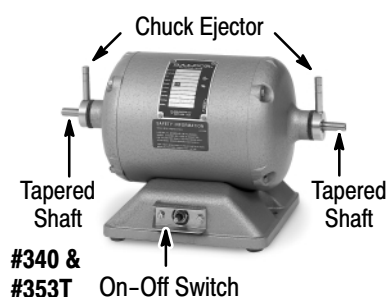
Baldor offers polishing lathes with various shaft configurations. Any accessory or attachment used with the polishing lathe must have mountings to match/fit the polishing lathe shaft.

Replace a cracked or chipped wheel immediately. A cracked wheel will disintegrate when operated, causing a hazard to operator and nearby personnel. If a wheel has a chip or crack on any surface, do not use it.

Use wheels marked for safe operations at or over the maximum RPM rating on this polishing lathe. Using a wheel rated at a lower RPM than the machine is rated can cause a hazardous condition and result in short wheel life.

This polishing lathe is supplied without guards. Operator safety may require guards and other suitable safety devices or procedures. These may be specified in safety codes and should be provided for each polishing application. These are neither provided by Baldor Electric Company nor are the responsibility of Baldor Electric Company. Safety devices are the responsibility of the end user.

Polishing Lathes



Installation

When you receive your unit, there are several things you should do immediately.

1. Observe the condition of the shipping container and report any damage immediately to the commercial carrier that delivered the product.
2. Verify that the part number you received is the same as the part number listed on your purchase order.

WARNING:

When starting the polishing lathe for the first time, or after installing a replacement wheel, it is most important that the operator stand aside for at least one minute of rotation at full speed. This is the correct practice since wheels can disintegrate if they have received damage during shipping or handling.

3. Mount polishing lathe on solid bench. The polishing lathe must be securely bolted to a rigid mounting surface. If a pedestal is used, first bolt pedestal securely to floor and then bolt polishing lathe to pedestal.
4. Check polishing lathe nameplate to make certain the rating is correct for the power source, voltage and frequency. See electrical and grounding instructions for electrical service connection.

Electrical Instructions

Single phase polishing lathes are equipped with cord and grounding type plug for 115 volts. To use with a different voltage, see instructions provided to make wiring changes. All attachment plugs and any receptacles must be replaced with devices rated for the voltage for which the polishing lathe is reconnected. Table 1 indicates the minimum wire size. Be sure to comply with NEC and local wiring codes.

Grounding Instructions

WARNING: Be sure the system is properly grounded before applying power. Do not apply power before you ensure that grounds are connected. Electrical shock can cause serious or fatal injury. Follow the National Electrical Code (NEC) and local codes for the safe installation of this equipment.

1. **All grounded, cord-connected polishing lathes:**

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This polishing lathe is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The "Green" insulated wire (with or without yellow stripes) is the equipment-grounding conductor. If repair or replacement of the electric cord is necessary, do not connect the equipment-grounding conductor to a live terminal. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

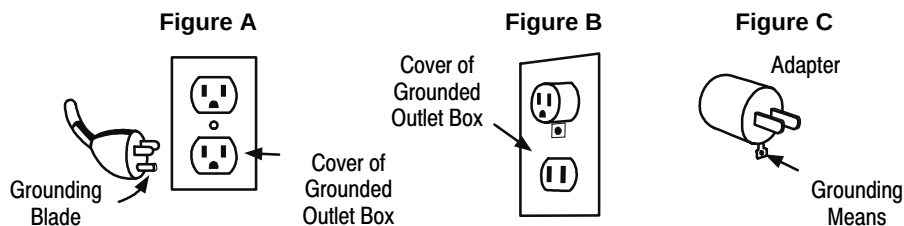
Repair or replace damaged or worn cord immediately.

2. **Grounded, cord-connected polishing lathes intended for use on a supply circuit having a nominal rating less than 150 volts:**

This polishing lathe is intended for use on a circuit that has an outlet that looks like the one illustrated in Figure A. The tool has a grounding plug that looks like the plug illustrated in Figure A. A temporary adapter, which looks like the adapter illustrated in Figures B and C, may be used (except in Canada) to connect this plug to a 2-pole receptacle as shown in Figure B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, etc. extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

3. **Permanently connected polishing lathes:**

This polishing lathe should be connected to a grounded, metal, permanent wiring system; or to a system having an equipment-grounding conductor.



Operation

WARNING: Do not operate this polishing lathe until you are sure that you are completely familiar with the safe operation of the polishing lathe, all accessories and safety equipment. Improper use can lead to severe injury. This manual defines proper use of this equipment. Before using this equipment for any other use, please consult Baldor. Contact Baldor if you do not understand any procedure or operation concerning this polishing lathe or this manual.

WARNING: When starting the polishing lathe for the first time, or after installing a replacement wheel, it is most important that the operator stand aside for at least one minute of rotation at full speed. This is the correct practice since wheels can disintegrate if they have received damage during shipping or handling.

Check that the On–Off switch is in the “OFF” position, and the shaft moves freely. When starting the polishing lathe for the first time or after replacing a wheel, it is important that the operator stand aside for at least one minute of operation at speed. This will ensure that operation will be safe from debris. After connecting polishing lathe to power source, turn switch on. polishing lathe should come up to speed smoothly and without vibration. If polishing lathe does not, shut polishing lathe off immediately and determine reason.

Always keep hands at least 2 inches from wheels. If the work piece is small, use a holder to keep hands 2 inches or more from wheels.

Use extreme care when polishing irregularly–shaped or small objects as they can be caught in the wheel and hurled outward with damaging force.

Always polish from the front of the machine. If the work piece is caught by the wheel, the wheel will normally spin the piece downward.

Polish on face (periphery) of the wheel only.

“Wells Quick Chuck” on Laboratory Lathe 380WCT allows changing of chuck with motor running. On ejector–type shaft, allow polishing lathe to come to a complete stop with motor off when changing chuck.

Maintenance

WARNING: Never install a wheel that is damaged, such as a chip or crack on any surface. A damaged wheel can disintegrate while rotating at a high RPM or when work is placed against the wheel. This can severely harm the operator or others in the area.

Replace worn wheel as necessary. The wheel should be replaced after the diameter is reduced by 2 inches from original size. When replacing a worn wheel, remove all dust from wheel guard.

Motor and pulley bearings are lubricated for life and do not require additional lubrication.

For Baldor polishing lathes supplied with “Wells Quick Chuck”, see separate user Manual for Wells Quick Chuck.

Wipe off polishing dust to prevent accumulation.

Replace damaged parts immediately to maintain safety of machine.

Table 1 Minimum Gauge Wire Size

Ampere Rating		Volts	Total Length of Cord (Cord + Extension, in Feet)			
		115V	25	50	100	150
		230V	50	100	200	300
More Than	Not More Than		AWG			
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

LIMITED WARRANTY

Unless otherwise provided, Baldor grinders are warranted against defects in Baldor workmanship and materials for a period of Thirty-Six months. All warranty claims must be submitted to a Baldor repair facility prior to the expiration of the warranty period. Baldor shall have no responsibility or liability for any defect, latent or otherwise, discovered after the expiration of the warranty period provided herein. Extended warranties are available for certain Baldor products. These warranties are described in Baldor's catalog and other sales literature. Extended warranties are subject to the terms and conditions of this Limited Warranty as modified by the additional terms of the extended warranty. If a Baldor product is defective due to Baldor workmanship or materials and the defect occurs during the warranty period, then Baldor will either repair the product or replace it with a new one, whichever Baldor believes to be appropriate under the circumstances. Warranty service is available for all Baldor products from Baldor's Customer Service Department in Fort Smith, Arkansas, and from Baldor repair facilities. A list of Baldor's repair facilities may be obtained by contacting Baldor at: Baldor Electric Company, 5711 R.S. Boreham, Jr. St., Fort Smith, Arkansas, 479-646-4711 (phone), 479-648-5792 (fax). All Baldor products requiring warranty service shall be transported or shipped freight pre-paid, at the risk of the party requiring warranty service, to Baldor's Customer Service Department in Fort Smith, Arkansas or to a Baldor repair facility. Written notification of the alleged defect in addition to a description of the manner in which the Baldor grinder is used, and the name, address and telephone number of the party requiring warranty service must be included. Baldor is not responsible for removal and shipment of the Baldor product to the service center nor for the reinstallation of the Baldor product upon its return to the party requiring warranty service. Customers who are unable to take or ship the Baldor product to a Baldor repair facility, or who desire a repair to be made by other than a Baldor repair facility, should contact Baldor's Customer Service Department at 479-646-4711. Repair by anyone other than a Baldor repair facility must be approved in writing by Baldor in advance of such service. Problems with Baldor products can be due to improper maintenance, faulty installation, non-Baldor additions or modifications, or other problems not due to defects in Baldor workmanship or materials. If a Baldor repair facility determines that the problem with a Baldor product is not due to defects in Baldor workmanship or materials, then the party requiring warranty service will be responsible for the cost of any necessary repairs. Parties requiring warranty service not satisfied with a determination that a problem is outside of warranty coverage should contact Baldor's Customer Service Department at 479-646-4711 for further consideration.

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