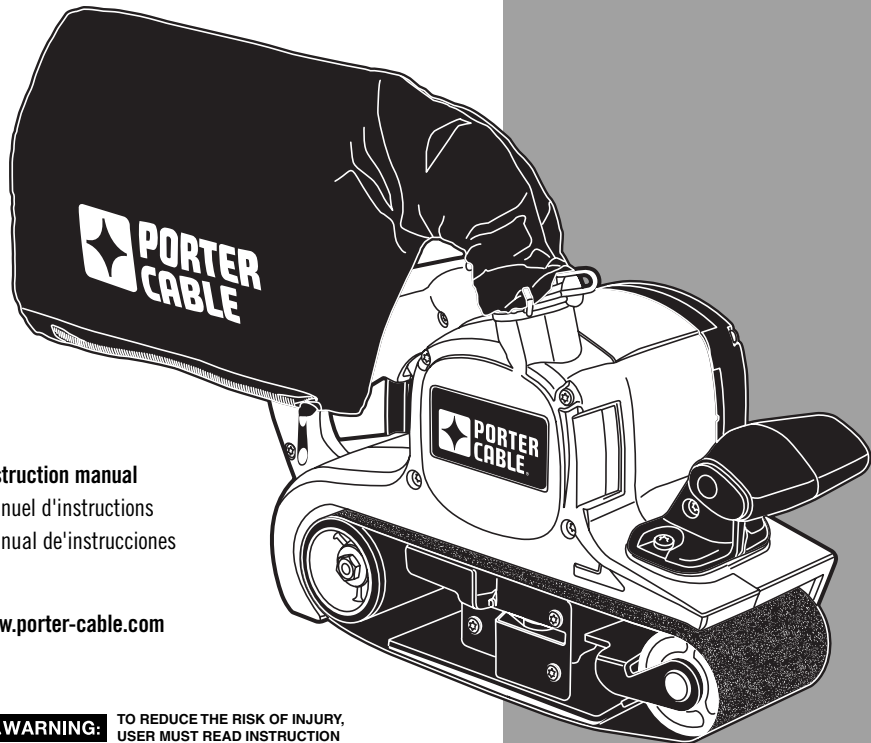


3" X 21" (76 x 533 mm) BELT SANDER

3" X 21" (76 x 533 mm)
Ponceuse à courroie

3" X 21" (76 x 533 mm)
Lijadora de correa



Instruction manual
Manuel d'instructions
Manual de instrucciones

www.porter-cable.com

▲ WARNING: TO REDUCE THE RISK OF INJURY, USER MUST READ INSTRUCTION MANUAL BEFORE OPERATING PRODUCT.
▲ ADVERTENCIA: PARA REDUCIR EL RIESGO DE LESIONES, EL USUARIO DEBE LEER EL MANUAL DE INSTRUCCIONES ANTES DE OPERAR EL PRODUCTO.
▲ AVERTISSEMENT: AFIN DE RÉDUIRE LE RISQUE DE BLESSURES, L'UTILISATEUR DOIT LIRE LE MODE D'EMPLOI AVANT D'UTILISER LE PRODUIT.

352VS

Part No. A23777 - 06-11-07 Rev. A

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DEFINITIONS - SAFETY GUIDELINES

- ▲ DANGER:** indicates an imminently hazardous situation which, if not avoided, will result in **death or serious injury**.
- ▲ WARNING:** indicates a potentially hazardous situation which, if not avoided, could result in **death or serious injury**.
- ▲ CAUTION:** indicates a potentially hazardous situation which, if not avoided, may result in **minor or moderate injury**.
- CAUTION:** used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in **property damage**.

General Safety Rules

▲ WARNING: Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

- 1) **Work area safety**
 - a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
 - b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
 - c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
- 2) **Electrical safety**
 - a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
 - b) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
 - c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
 - d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock. Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug.
 - e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** If an extension cord is to be used outdoors, it must be marked with the suffix W-A or W following the cord type designation. Use of a cord suitable for outdoor use reduces the risk of electric shock. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Minimum Gauge for Cord Sets

Volts	Total Length of Cord in Feet			
	0-25	26-50	51-100	101-150
120V				
Ampere Rating	Gauge of wire in AWG units			
From 6 to 10 amps	18	16	14	12

- 3) **Personal safety**
 - a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
 - b) **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
 - c) **Avoid accidental starting. Be sure the switch is in the off-position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
 - d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
 - e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
 - f) **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts. Air vents often cover moving parts and should also be avoided.

- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust-related hazards.
- 4) **Power tool use and care**
 - a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
 - b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - c) **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
 - d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
 - e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
 - f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
 - g) **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- 5) **Service**
 - a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

ADDITIONAL SPECIFIC SAFETY RULES

- **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- **Do not sand metal of any kind with your sander.** Sparks may be generated by sanding screws, nails or other metals which may ignite dust particles.
- **Do not wet sand with this sander.** Liquids may enter the motor housing and cause electric shock.
- **Empty dust bag frequently. Especially when sanding resin coated surfaces such as polyurethane, varnish, shellac, etc.** The accumulation of fine sanding dust particles may self ignite and cause fire.
- **Do not operate this tool for long periods of time.** Vibration caused by the operating action of this tool may cause permanent injury to fingers, hands, and arms. Use gloves to provide extra cushion, take frequent rest periods, and limit daily time of use.
- **Sanding of lead-based paint, chemically pressure treated lumber or other materials that may contain carcinogens is not recommended.** Sanding of these materials should only be performed by a professional.
- **Clean out your tool often, especially after heavy use.** Dust and grit containing metal particles often accumulate on interior surfaces and could create a risk of serious injury, electric shock or electrocution. ALWAYS disconnect the sander from the power source before cleaning. ALWAYS WEAR SAFETY GLASSES that conform to ANSI Z87.1.
- **ALWAYS disconnect tool from the power source before changing abrasive belts or sheets.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **ALWAYS maintain a firm grip with both hands on the belt sander handles with both hands to prevent loss of control.**
- **ALWAYS keep fingers away from the moving belt and areas where the belt enters the housing to avoid severe abrasion.**
- **Do not operate belt sander without all guards and covers securely in place.**
- **To avoid injury, do not use this tool in a stand that would invert it for use as a stationary belt sander.** This tool is not made for that application.

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

- lead from lead-based paint.
- crystalline silica from bricks and cement and other masonry products.
- arsenic and chromium from chemically-treated lumber (CCA).

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.

▲ WARNING: Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

▲ WARNING: Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body. Always operate tool in well-ventilated area and provide for proper dust removal. Use dust collection system wherever possible.

▲ WARNING: ALWAYS USE SAFETY GLASSES.(ANSI Z87.1) and (CAN/CSA Z94.3) Everyday eye-glasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3)
- ANSI S12.6 (S3.19) hearing protection
- NIOSH/OSHA/MSHA respiratory protection

SYMBOLS

The label on your tool may include the following symbols. The symbols and their definitions are as follows:

V.....volts	A.....amperes
Hz.....hertz	W.....watts
min.....minutes	~.....alternating current
—=—.....direct current	n ₀no load speed
Ⓛ.....Class I Construction (grounded)	Ⓧ.....earthing terminal
Ⓡ.....Class II Construction (double insulated)	▲.....safety alert symbol
BPM.....beats per minute	.../min.....revolutions or reciprocations per minute

ADDITIONAL SAFETY RULES FOR PAINT REMOVAL

1. Sanding of lead based paint is NOT RECOMMENDED due to the difficulty of controlling the contaminated dust. The greatest danger of lead poisoning is to children and pregnant women.
2. Since it is difficult to identify whether or not a paint contains lead without a chemical analysis, we recommend the following precautions when sanding any paint:

PERSONAL SAFETY

1. No children or pregnant women should enter the work area where the paint sanding is being done until all clean up is completed.
2. A dust mask or respirator should be worn by all persons entering the work area. The filter should be replaced daily or whenever the wearer has difficulty breathing. See your local hardware store for the proper NIOSH approved dust mask.
3. NO EATING, DRINKING or SMOKING should be done in the work area to prevent ingesting contaminated paint particles. Workers should wash and clean up BEFORE eating, drinking or smoking. Articles of food, drink, or smoking should not be left in the work area where dust would settle on them.

ENVIRONMENTAL SAFETY

1. Paint should be removed in such a manner as to minimize the amount of dust generated.
2. Areas where paint removal is occurring should be sealed with plastic sheeting of 4 mil thickness.
3. Sanding should be done in a manner to reduce tracking of paint dust outside the work area.

CLEANING AND DISPOSAL

1. All surfaces in the work area should be vacuumed and thoroughly cleaned daily for the duration of the sanding project. Vacuum filter bags should be changed frequently.
2. Plastic drop cloths should be gathered up and disposed of along with any dust chips or other removable debris. They should be placed in sealed refuse receptacles and disposed of through regular trash pick-up procedures. During clean up, children and pregnant women should be kept away from the immediate work area.
3. All toys, washable furniture and utensils used by children should be washed thoroughly before being used again.

SAVE THESE INSTRUCTIONS

MOTOR

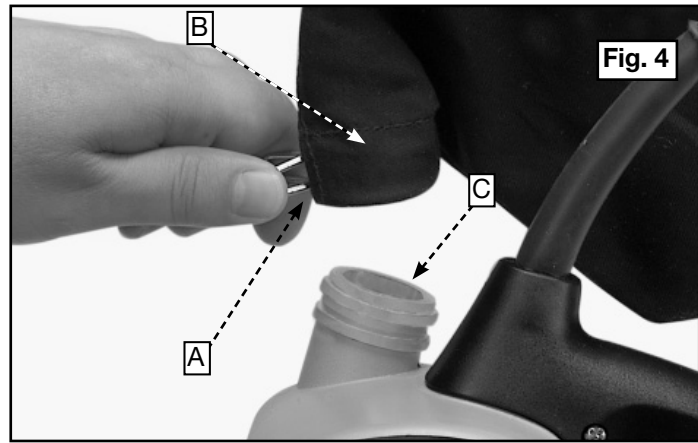
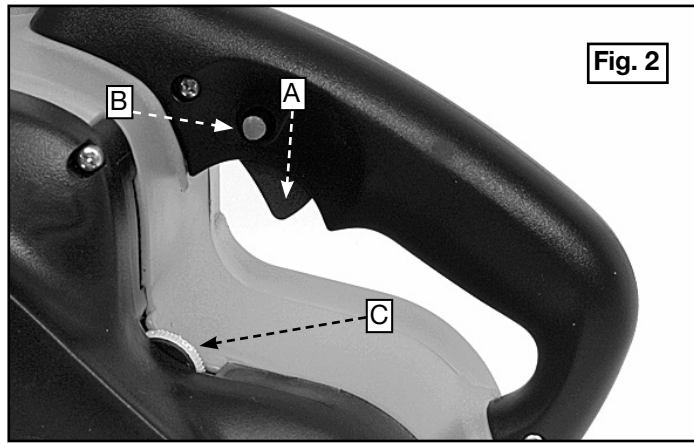
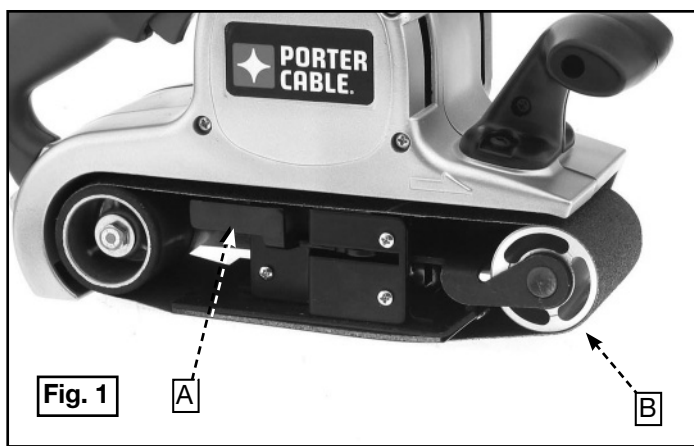
CAUTION: Do not operate your tool on a current on which the voltage is not within correct limits. Do not operate tools rated A.C. only on D.C. current. To do so may seriously damage the tool.

OPERATION

▲ WARNING: To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.

▲ WARNING: NEVER modify the power tool or any part of it. Damage or personal injury could result.

▲ WARNING: To reduce the risk of serious personal injury, secure the workpiece and maintain a firm grip



on the sander. Friction between the sanding belt and the work will tend to move the work backward and the sander forward.

▲WARNING: To avoid severe abrasion, ALWAYS keep fingers away from the moving belt and areas where the belt enters the housing.

INSTALLING AND REMOVING THE ABRASIVE BELT

▲WARNING: To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.

▲WARNING: Severe laceration hazard. If installed backwards, unidirectional sanding belts may not track properly and may overhang the housing, possibly causing severe lacerations.

1. Place the sander on its left side.
2. Pull the lever (A) Fig. 1 out toward the front of the machine to retract the idler pulley (B) and release the tension on the abrasive belt.
3. Remove the old belt.
4. Install the new belt with the arrow (printed on the inside of the belt) on the top and pointing TOWARD the idler pulley.

NOTE: Some sanding belts are bi-directional. These belts will not have arrows printed on them. They can be installed to run in either direction.

5. Engage the front pulley by pushing the lever (A) Fig. 1 back to its original position.

TO START AND STOP THE BELT SANDER

▲WARNING: To reduce the risk of injury, make sure the sander is not resting on the workpiece when the operating speed (850 SFM) while position 6 is the fastest (1300 SFM). The speed can be changed either when the motor is running or is stopped.

▲CAUTION: To reduce the risk of injury, check to see that the belt guard (G) Fig. 3 is in place, secured, and working correctly.

1. Be certain that the the switch is off and the power circuit voltage is the same as the voltage shown on the specification plate. Connect the machine to the power circuit.
2. Squeeze the trigger (A) Fig. 2 to start the motor. Release the trigger to stop the motor.
3. To allow the motor to run without constantly holding the trigger, press the trigger switch (A), push and hold the lock button (B) Fig. 2 while releasing the trigger switch.
4. To release the lock button, squeeze the trigger and release.

VARIABLE SPEED

Model 352VS has a Variable Speed Control. The operating speed is adjustable between 850 SFM (surface feet per minute) and 1300 SFM.

The speed is adjusted by turning the thumbwheel, (C) Fig. 2. The first position provides the slowest operating speed (850 SFM) while position 6 is the fastest (1300 SFM). The speed can be changed either when the motor is running or is stopped.

TRACKING THE ABRASIVE BELT

▲WARNING: Severe laceration hazard. Properly adjust the tracking of the belt to avoid it overhanging the housing. A running belt overhanging the housing can cause severe lacerations.

▲CAUTION: Make sure the trigger switch is "OFF" before connecting the tool to power source.

To prevent excessive wear on both the sander and belt, NEVER allow the abrasive belt to rub on the sander frame. To make sure that the belt is tracking correctly, do the following:

1. Turn the tool over. Hold the rear handle with the left hand so that the ring finger and the little finger rest on trigger (Fig. 3).
2. Squeeze the trigger to start the motor.
3. Turn the belt aligning screw (A) in either direction until the edge of the belt is even with the outer edge of the rear rubber-covered pulley. The edge of the belt will extend beyond the edge of the front pulley.
4. Release the trigger to stop the motor. Allow the tool to come to a COMPLETE STOP before turning it over and putting it down.

DUST COLLECTION

▲WARNING: To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.

▲WARNING: Empty dust collection system frequently, especially when sanding resin-coated surfaces such as polyurethane, varnish, shellac, etc. Dispose of coated dust particles according to the finish manufacturer's guidelines, or place in a metal can with a tight fitting metal lid. Remove coated dust particles from the premises daily. The accumulation of fine sanding dust particles may self ignite and cause fire.

▲WARNING: Shock hazard. The use of a vacuum hose and vacuum adapter with the belt sander may generate static electricity that could result in startling static discharge.

▲WARNING: Fire hazard. Do not use a dust collection device when sanding metal. Doing so creates a fire hazard, which may cause serious personal injury and/or damage to the tool.

▲CAUTION: Do not operate the tool without a dust bag.

To install the dust bag depress the spring clips (A) Fig. 4 of the dust bag (B) and clip the dust bag over the rib of the dust spout (C). For the most efficient operation, empty the dust bag when it is approximately half full. Squeeze the spring clip and pull dust bag off vacuum housing, unzip the rear of the bag, and shake out the dust. Every so often, turn the bag inside out and brush the accumulated dust from the inside.

GENERAL SANDING

▲CAUTION: Secure the work and maintain a firm grip on the sander. Friction between the sanding belt and the work will tend to move the work backward and the sander forward.

▲CAUTION: ALWAYS be sure the switch is OFF before connecting the tool to power source.

1. Hold the sander off the work before starting the motor.
2. Lower the sander to the work, touching the rear part of the belt first. Level the machine when moving it forward.
3. Guide the machine over the work in overlapping strokes. Allow the sander to do the work.
4. Avoid applying excessive pressure. The weight of the machine is usually sufficient for a fast smooth finish. A slight increase in pressure may speed removal of material, but too much pressure will slow the motor and decrease removal.
5. Work back and forth over a fairly wide area to obtain an even surface.
6. Do not let the tool tilt. The edge of the belt can make a deep cuts into the surface.
7. Do not pause in any one spot during the sanding operation. The belt will eat into the work and make the surface uneven.
8. Lift the tool from the work before turning the motor off.
9. Always be sure that the motor has completely stopped before putting the tool down.

TROUBLESHOOTING

For assistance with your tool, visit our website at www.porter-cable.com for a list of service centers, or call the Porter-Cable Customer Care Center at (888) 848-5175.

MAINTENANCE

▲WARNING: To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.

REPAIRS

For assistance with your tool, visit our website at www.porter-cable.com for a list of service centers, or call the Porter-Cable Customer Care Center at (888) 848-5175.

CLEANING

▲WARNING: Periodically blowing dust and chips out of the motor housing using clean, dry compressed air is a suggested maintenance procedure. To reduce the risk of serious personal injury, ALWAYS wear ANSI Z87.1 safety glasses while using compressed air.

▲WARNING: When cleaning, use only mild soap and a damp cloth on plastic parts. Many household cleaners contain chemicals which could seriously damage plastic. Also, do not use gasoline, turpentine, lacquer or paint thinner, dry cleaning fluids or similar products which may seriously damage plastic parts. NEVER let any liquid get inside the tool; NEVER immerse any part of the tool into a liquid.

FAILURE TO START

Should your tool fail to start, check to make sure the prongs on the cord plug are making good contact in the outlet. Also, check for blown fuses or open circuit breakers in the line.

LUBRICATION

This tool has been lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions. No further lubrication is necessary.

BRUSH INSPECTION (If applicable)

For your continued safety and electrical protection, brush inspection and replacement on this tool should ONLY be performed by a PORTER-CABLE FACTORY SERVICE CENTER OR PORTER-CABLE AUTHORIZED WARRANTY SERVICE CENTER.

At approximately 100 hours of use, take or send your tool to your nearest Porter-Cable Factory Service center or Porter-Cable Authorized Warranty Service Center to be thoroughly cleaned and inspected. Have worn parts replaced and lubricated with fresh lubricant. Have new brushes installed, and test the tool for performance.

Any loss of power before the above maintenance check may indicate the need for immediate servicing of your tool. **DO NOT CONTINUE TO OPERATE TOOL UNDER THIS CONDITION.** If proper operating voltage is present, return your tool to the service station for immediate service.

SERVICE

REPLACEMENT PARTS

Use only identical replacement parts. For a parts list or to order parts, visit our website at servicenet.porter-cable.com. You can also order parts from your nearest Porter-Cable Factory Service Center or Porter-Cable Authorized Warranty Service Center. Or, you can call our Customer Care Center at (888) 848-5175.

SERVICE AND REPAIRS

All quality tools will eventually require servicing and/or replacement of parts. For information about Porter-Cable, its factory service centers or authorized warranty service centers, visit our website at www.porter-cable.com or call our Customer Care Center at (888) 848-5175. All repairs made by our service centers are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by others.

You can also write to us for information at PORTER-CABLE, 4825 Highway 45 North, Jackson, Tennessee 38305 - Attention: Product Service. Be sure to include all of the information shown on the nameplate of your tool (model number, type, serial number, etc.).

ACCESSORIES

A complete line of accessories is available from your Porter-Cable Factory Service Center or a Porter-Cable Authorized Warranty Service Center. Please visit our Web Site www.porter-cable.com for a catalog or for the name of your nearest supplier.

▲WARNING: Since accessories other than those offered by Porter-Cable have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Porter-Cable recommended accessories should be used with this product.

THREE YEAR LIMITED WARRANTY

PORTER-CABLE will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. This warranty does not cover part failure due to normal wear or tool abuse. For further detail of warranty coverage and warranty repair information, visit www.porter-cable.com or call (888) 848-5175. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

In addition to the warranty, PORTER-CABLE tools are covered by our:

1 YEAR FREE SERVICE: PORTER-CABLE will maintain the tool and replace worn parts caused by normal use, for free, any time during the first year after purchase.

90 DAY MONEY BACK GUARANTEE: If you are not completely satisfied with the performance of your PORTER-CABLE Power Tool, Laser, or Nailer for any reason, you can return it within 90 days from the date of purchase with a receipt for a full refund – no questions asked.

LATIN AMERICA: This warranty does not apply to products sold in Latin America. For products sold in Latin America, see country specific warranty information contained in the packaging, call the local company or see website for warranty information.

To register your tool for warranty service visit our website at www.porter-cable.com.

WARNING LABEL REPLACEMENT

If your warning labels become illegible or are missing, call (888) 848-5175 for a free replacement.

