

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 paints,
- · crystalline silica from bricks and cement and other masonry products, and
- · 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.

GENERAL SAFETY RULES

WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS.

WORK AREA

1. Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.

2. 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.

3. Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

1. Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double Insulation eliminates the need for the three wire grounded power cord and grounded power supply system.

2. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.

3. Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

4. Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

5. When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

PERSONAL SAFETY

1. Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use tool while tired or under the

influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

3. Avoid accidental starting. Be sure switch is OFF before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch ON invites accidents.

4. Remove adjusting keys or wrenches before turning the tool ON. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

5. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enable better control of the tool in unexpected situations.

6. Use safety equipment. Always wear eye protection. Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOLS USE AND CARE

1. Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

2. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

3. Do not use tool if switch does not turn it ON or OFF. A tool that cannot be controlled with the switch is dangerous and must be repaired.

4. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

5. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

6. Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.

7. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

8. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

1. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel may result in a risk of injury.

2. When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance Section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES AND SYMBOLS FOR SHEARS

1. ALWAYS hold the tool as instructed in HOW TO HOLD TOOL section. This will prevent accidental shock resulting from cutting a live wire when cutting into a wall or other blind area.

- 2. **KEEP** hands away from cutting area.
- 3. ALWAYS use sharp cutting tools.
- 4. STAY CLEAR of end pieces that may fall after being cut off.

5. ALWAYS KEEP the power cord away from the edge of the material being sheared. Sharp edges can result in the cord insulation being cut. This condition may create an electrical hazard.

6. Some wood contains preservatives which can be toxic. Take extra care to prevent inhalation and skin contact when working with these materials. Request, and follow, any safety information available from your material supplier.

7. WARNING: There are certain applications for which this tool was designed. Porter-Cable strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Porter-Cable and we have advised you.

Technical Service Manager Porter-Cable Corporation 4825 Highway 45 North Jackson, TN 38305

SYMBOL	DEFINITION Jackson, IN 38305					
V	 volts					
A	 amperes					
Hz	 hertz					
W	 watts					
kW	 kilowatts					
μF	 microfarads					
I	 liters					
kg	 kilograms					
N/cm ²	 newtons per square centimeter					
Pa	 pascals					
h	 hours					
min	 minutes					
s	 seconds					
$\tilde{\mathcal{A}}$	 alternating current					
3	 three-phase alternating current					
3м 🗸	 three-phase alternating current with neutral					
	 direct current					
n _o	 no load					
\sim	 alternating or direct current					
	 Class II Construction					
	 splash-proof construction					
••	 watertight construction					
/min	 revolutions or reciprocation per minute					

REPLACEMENT PARTS

When servicing use only identical replacement parts.

MOTOR

Many Porter-Cable tools will operate on either D.C., or single phase 25 to 60 cycle A.C. current and voltage within plus or minus 5 percent of that shown on the specification plate on the tool. Several models, however, are designed for A.C. current only. Refer to the specification plate on your tool for proper voltage and current rating.

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.

EXTENSION CORD SELECTION

If an extension cord is used, make sure the conductor size is large enough to prevent excessive voltage drop which will cause loss of power and possible motor damage. A table of recommended extension cord sizes will be found in this section. This table is based on limiting line voltage drop to 5 volts (10 volts for 230 volts) at 150% of rated amperes.

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. For example – SJTW-A to indicate it is acceptable for outdoor use.

	Length of Cord in Feet												
	115V	25 Ft.	50 Ft.	100 Ft.	150 Ft.	200 Ft.	250 Ft.	300 Ft.	400 Ft.	500 Ft.			
	230V	50 Ft.	100 Ft.	200 Ft.	300 Ft.	400 Ft.	500 Ft.	600 Ft.	800 Ft.	1000 Ft.			
Nameplate Ampere Rating	0-2	18	18	18	16	16	14	14	12	12			
	2-3	18	18	16	14	14	12	12	10	10			
	3-4	18	18	16	14	12	12	10	10	8			
	4-5	18	18	14	12	12	10	10	8	8			
	5-6	18	16	14	12	10	10	8	8	6			
	6-8	18	16	12	10	10	8	6	6	6			
	8-10	18	14	12	10	8	8	6	6	4			
	10-12	16	14	10	8	8	6	6	4	4			
	12-14	16	12	10	8	6	6	6	4	2			
	14-16	16	12	10	8	6	6	4	4	2			
	16-18	14	12	8	8	6	4	4	2	2			
	18-20	14	12	8	6	6	4	4	2	2			

RECOMMENDED EXTENSION CORD SIZES FOR USE WITH PORTABLE ELECTRIC TOOLS

FUNCTIONAL DESCRIPTION

FOREWORD

The Porter-Cable **Model 6602** Shear is designed for cutting cold rolled steel sheets of up to 18 Ga. and stainless steel sheets of up to 20 Ga. Both straight and curved cuts (minimum radius: 7") may be made. The Shear removes a ¹/₄" wide, continuous curl of waste material without bending or burring the finished workpiece.

The Porter-Cable **Model 6604** Cement Siding Shear is designed for cutting cement siding. Both straight and curved cuts (minimum radius: 7") may be made. The Shear removes a 1/4" wide piece of waste material.

OPERATION

HOW TO HOLD SHEAR

WARNING: The gear housing, intermediate plate, and cutting head may be made live if the tool cuts into live wiring. To prevent accidental shock, the tool must be held as shown in Fig. 1.



Fig. 1

TO START AND STOP SHEAR

CAUTION: Make sure switch is in OFF position and hands, body and clothing are clear of cutting head before connecting tool to power circuit.

1. Squeeze trigger switch (A) Fig. 2, to start motor. Release trigger switch to stop motor.

2. A lock button (B) Fig. 2, is provided to keep motor running without holding the trigger switch ON.

3. To lock the trigger switch ON, squeeze the trigger as far as it will go, push in lock button and release trigger. **NOTE:** When the trigger is locked, the tool will only run at the maximum speed.

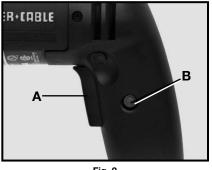


Fig. 2

4. To unlock lock button, squeeze trigger and release, leaving lock button free to spring out.

5. As the trigger switch is squeezed, the cutting speed increases.

HOW TO USE SHEAR

Model 6602:

Be sure the material to be sheared is firmly supported. Clamping is recommended to insure control of the tool and the workpiece. Place side knives of shear slightly on the edge of the top side of the workpiece to steady tool. Squeeze the trigger switch and guide shear into work. The tool cuts freely with only slight pressure. Forcing the tool will not make it cut faster. Always use sharp cutters. A light coat of suitable cutting fluid applied along the line of cut will increase cutter life.

A cut-out within the perimeter of the workpiece may be produced by drilling a ¼" diameter starting hole, then following directions above.

Model 6604:

Be sure the material to be sheared is firmly supported. Clamping is recommended to insure control of the tool and the workpiece. The material to be cut should be positioned with the hidden or back surface of the material facing up to reduce marring of the exposed side. To achieve maximum cutting efficiency the bottom of stationary blades should be held parallel to and against the material being cut.

REPLACING CUTTERS

Replacement cutters are installed as follows:

CAUTION: DISCONNECT TOOL FROM POWER SOURCE.

REMOVE CUTTER BLADES (see Fig. 3):

1. Remove shear head from motor unit: loosen three cap screws (A) and pull cutter head forward (a light twisting motion may be helpful), to separate it from motor unit.

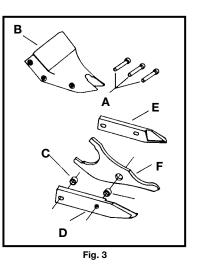
2. Remove the three cap screws (A) from the shear housing (do not lose spacer bushing (C) from the middle cap screw).

3. Remove the center blade by gently tapping it rearward (do not lose spacer bushing (C) from hole in center blade).

4. The side knives (D) and (E) will now drop out of the shear housing.

INSTALL CUTTER BLADES (see Fig. 3):

Note: For Model 6604 change side



knives after they show a wear pattern of fifty percent (50%) in width. They can be swapped left to right and used until the patterns meet. When the patterns meet, the left and right side knives can be inverted and used until they show a wear pattern of fifty percent (50%) in width, and then they can be swapped from left to right until all four (4) sides of the blades are used. Never exceed 10,000 feet of cutting on a set of side knives. The tool will continue to cut after these landmarks are reached but will cause overloading to the power unit.

1. Place the side knives (D) and (E) back into the shear housing, insert a cap screw through center hole in shear housing, side knife (E), spacer bushing (C), side knife, (D), and thread screw into housing threads one or two turns. DO NOT TIGHTEN.

2. Coat remaining spacer bushing (C) with lubricant and insert into hole in center blade (F). Start center blade (with spacer bushing), into rear of shear housing, and tap it forward until the hole in the spacer bushing aligns with the front hole in the shear housing. Insert a cap screw and thread it into housing threads one or two turns. **DO NOT TIGHTEN.** Coat center blade yoke area with lubricant.

3. Insert remaining cap screw into rear hole in shear housing and thread it into housing threads one or two turns. **DO NOT TIGHTEN.**

4. Place shear head onto motor unit and seat with a light twisting motion. Rotate the shear head to desired position (the shear head may be used at any radial position), and tighten all three cap screws (A). For Model 6602 tighten all three cap screws (A) to 30-35 in-lbs., failure to tighten the cap screws properly can cause the cap screws (A), to break. For Model 6604 tighten all three cap screws (A) to 45-50 in-lbs., failure to tighten the cap screws properly can cause the cap screws (A), to break.

MAINTENANCE

KEEP TOOL CLEAN

Periodically blow out all air passages with dry compressed air. All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.

CAUTION: Wear safety glasses while using compressed air.

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.

BRUSH INSPECTION AND LUBRICATION

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

At approximately 100 hours of use, take or send your tool to your nearest authorized Porter-Cable Service Station to be thoroughly cleaned and inspected. Have worn parts replaced and lubricate 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.

SERVICING THE ECCENTRIC BEARING (see Fig. 4)

NOTE: For model 6602 only, Model 6604 does not require this service.

Once every three months, depending upon usage, remove the shear head from the power unit following the instructions in the REPLACING CUTTERS section of the manual.

> **CAUTION:** DISCONNECT TOOL FROM POWER SOURCE BEFORE DISASSEMBLING.



Fig. 4

Put a few drops of heavy oil on the eccentric bearing assembly (A) Fig. 4,

so that it saturates the needle bearing. The outside surface of the eccentric bearing ring and the yoke of the center blade should be coated with bearing lubricant.

SERVICE AND REPAIRS

All quality tools will eventually require servicing or replacement of parts due to wear from normal use. These operations, including brush inspection and replacement, should ONLY be performed by either an AUTHORIZED PORTER-CABLE SERVICE STATION or a PORTER-CABLE/DELTA FACTORY SERVICE CENTER. All repairs made by these agencies are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by anyone other than these agencies.

Should you have any questions about your tool, feel free to write us at any time. In any communications, please give all 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 • Delta Supplier, Porter-Cable • Delta Factory Service Centers, and Porter-Cable Authorized Service Stations. 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 • Delta have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Porter-Cable • Delta recommended accessories should be used with this product.

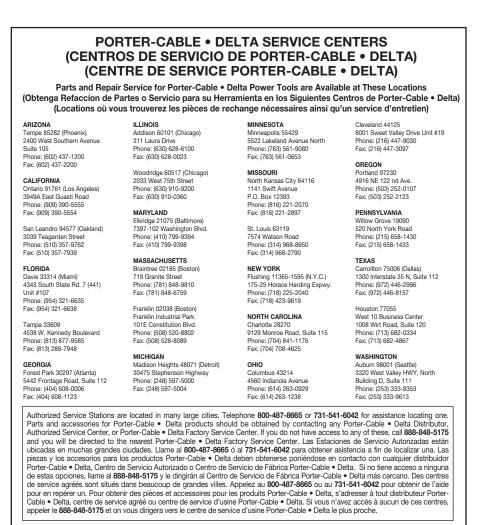
PORTER-CABLE LIMITED ONE YEAR WARRANTY

Porter-Cable warrants its Professional Power Tools for a period of one year from the date of original purchase. We will repair or replace at our option, any part or parts of the product and accessories covered under this warranty which, after examination, proves to be defective in workmanship or material during the warranty period. For repair or replacement return the complete tool or accessory, transportation prepaid, to your nearest Porter-Cable Service Center or Authorized Service Station. Proof of purchase may be required. This warranty does not apply to repair or replacement required due to misuse, abuse, normal wear and tear or repairs attempted or made by other than our Service Centers or Authorized Service Stations.

ANY IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WILL LAST ONLY FOR ONE (1) YEAR FROM THE DATE OF PURCHASE.

To obtain information on warranty performance please write to: PORTER-CABLE CORPORATION, 4825 Highway 45 North, Jackson, Tennessee 38305; Attention: Product Service. THE FOREGOING OBLIGATION IS PORTER-CABLE'S SOLE LIABILITY UNDER THIS OR ANY IMPLIED WARRANTY AND UNDER NO CIRCUMSTANCES SHALL PORTER-CABLE BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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