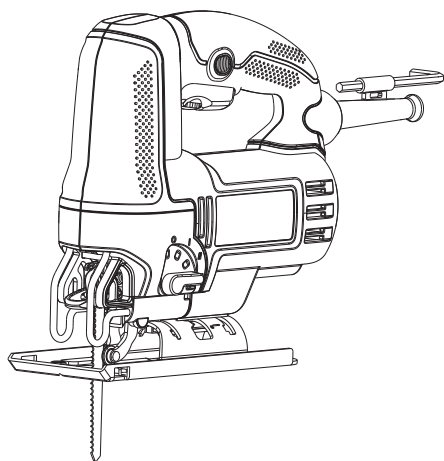


PORTER CABLE®

6A VS Orbital Jig Saw



Instruction manual

CATALOG NUMBER

PCE345

SAFETY GUIDELINES - DEFINITIONS

It is important for you to read and understand this manual. The information it contains relates to protecting **YOUR SAFETY and PREVENTING PROBLEMS**. The symbols below are used to help you recognize this information.

⚠ 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.

NOTICE: Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING: Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

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.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

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 personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, nonskid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing 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.*
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. *Use of dust collection 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 and/or the battery pack from the power tool 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 tool's 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, 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.*

JIG SAW SAFETY WARNINGS

- Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring. *Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*
- Use clamps or another practical way to secure and support the workpiece to a stable platform. *Holding the work by hand or against your body leaves it unstable and may lead to loss of control.*
- Keep hands away from cutting area. *Never reach underneath the material for any reason. Hold front of saw by grasping the contoured gripping area. Do not insert fingers or thumb into the vicinity of the reciprocating blade and blade clamp. Do not stabilize the saw by gripping the shoe.*
- Keep blades sharp. *Dull blades may cause the saw to swerve or stall under pressure.*
- Use extra caution when cutting overhead and pay particular attention to overhead wires which may be hidden from view. *Anticipate the path of falling branches and debris ahead of time.*
- When cutting pipe or conduit ensure that they are free from water, electrical wiring, etc.

⚠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 (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.

- 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: ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if drilling operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CPA Z94.3),
- ANSI S12.6 (S3.19) hearing protection,
- NOSH/OSHA respiratory protection.

⚠WARNING: Use of this tool can generate and/or disperse 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.

⚠CAUTION: Wear appropriate hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

SAVE THESE INSTRUCTIONS

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

minminutes

~or AC.....alternating current

— or DC...direct current

n_ono load speed

ⓂClass I Construction
(grounded)

⊖earthing terminal

ⓂClass II Construction
(double insulated)

⚠safety alert symbol

📖Read instruction manual before use

.../min or rpm...revolutions or
reciprocation per minute

🧴Use proper respiratory protection

👁Use proper eye protection

👂Use proper hearing protection

sfpm surface feet per minute

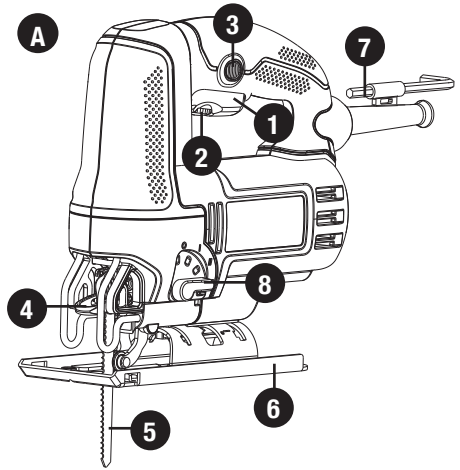
SPM..... Strokes per minute

- 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 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.

Volts	Minimum Gage for Cord Sets			
	Total Length of Cord in Feet			
120V	0-25	26-50	51-100	101-150
	(0-7,6m)	(7,6-15,2m)	(15,2-30,4m)	(30,4-45,7m)
240V	0-50	51-100	101-200	201-300
	(0-15,2m)	(15,2-30,4m)	(30,4-60,9m)	(60,9-91,4m)
Ampere Rating		American Wire Gage		
More Than	Not more Than			
0 - 6	18	16	16	14
6 - 10	18	16	14	12
10 - 12	16	16	14	12
12 - 16	14	12	Not Recommended	

FUNCTIONAL DESCRIPTION

1. Variable speed switch
2. Speed control dial
3. Lock-on button
4. Saw blade locking lever
5. Saw blade
6. Shoe
7. Wrench
8. Cutting action lever

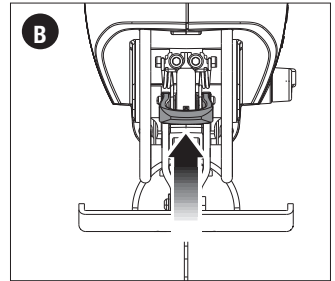


OPERATION

⚠ WARNING: Before attempting any of the following operations, make sure that the tool is switched off and unplugged and that the saw blade has stopped. Used saw blades can be hot.

BLADE INSTALLATION (FIGURE B)

- Push the saw blade locking lever (4) upward.
- With teeth facing forward, insert the shank of the saw blade into the blade holder as far as it will go.
- Release the lever.
- Check to ensure blade is secure before cutting.

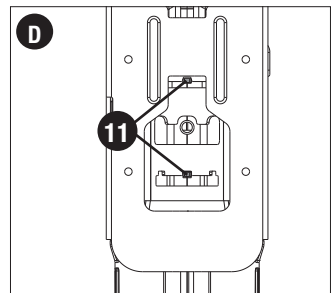
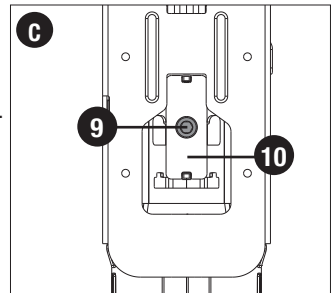


ADJUSTING THE SHOE FOR BEVEL CUTS

⚠ WARNING: Never use the tool when the shoe (6) is loose or removed.

The shoe can be set to a left or right bevel angle up to 45°.

- Turn saw upside down. Use the wrench (7) to loosen the clamping screw (9) and clamp plate (10) as shown in figure C.
- Slide the shoe (6) forward and rotate left or right to the required angle.
- Slide the shoe backward so the shoe plate keyways engage the two lock posts (11) on the tool as shown in figure D.
- Tighten clamping screw and clamp plate with its beveled side towards the tool.

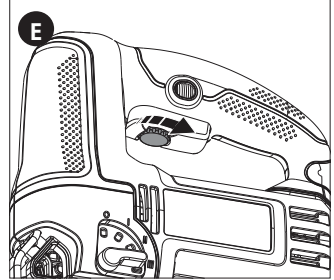


SWITCHING ON AND OFF

- To switch the tool on, depress the variable speed switch (1). The tool speed depends on how far you depress the switch.
 - For continuous operation, press the lock-on button (3) and release the variable speed switch. This option is available only at full speed.
 - To switch the tool off, release the variable speed switch.
- To switch the tool off when in continuous operation, press the variable speed switch once more and release it.

SPEED CONTROL DIAL

By rotating the speed control dial (2), the maximum speed- or strokes-per-minute at which the blade will cut is adjusted. Rotating the dial in the direction shown in **figure E** will increase speed. To decrease speed, rotate dial in opposite direction.



CUTTING ACTION – ORBITAL OR STRAIGHT (FIGURE F)

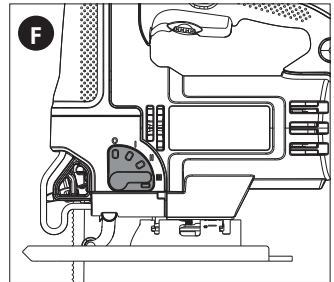
CAUTION: Check that the tool is not locked **ON** before connecting it to a power supply. If the trigger switch is locked **ON** when the tool is connected to the power supply, it will start immediately. Damage to your tool or personal injury may result.

This jig saw is equipped with four cutting actions, three orbital and one straight. Orbital action has a more aggressive blade motion and is designed for cutting in soft materials like wood or plastic. Orbital action provides a faster cut, but with a less smooth cut across the material. In orbital action, the blade moves forward during the cutting stroke in addition to the up and down motion.

NOTE: Metal or hardwoods should never be cut in orbital action.

To adjust the cutting action:

- Move the cutting action lever (8) between the four cutting positions: 0, 1, 2, and 3.
- Position 0 is straight cutting.
- Positions 1, 2, and 3 are orbital cutting.
- The aggressiveness of the cut increases as the lever is adjusted from one to three, with three being the most aggressive cut.



Hints for optimum use

Sawing laminates

As the saw blade cuts on the upward stroke, splintering may occur on the surface closest to the shoe plate.

- Use a fine-tooth saw blade.
- Saw from the back surface of the workpiece.
- To minimize splintering, clamp a piece of scrap wood or hardboard to both sides of the workpiece and saw through this sandwich.

Sawing metal

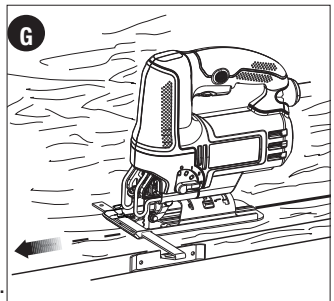
- Be aware that sawing metal takes much more time than sawing wood.
- Use a saw blade suitable for sawing metal.
- When cutting thin metal, clamp a piece of scrap wood to the back surface of the workpiece and cut through this sandwich.
- Spread a film of oil along the intended line of cut for easier operation and longer blade life. For cutting aluminum, kerosene is preferred.

RIP / CIRCLE CUTTING (FIGURE G, H)

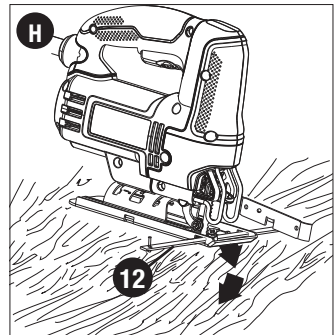
Ripping and circle cutting without a pencil line are easily done with the rip fence / circle guide (not included - available at extra cost).

Using the screw supplied with the accessory guide, position as shown in **figure G** and thread the screw into the shoe to clamp the fence securely.

When ripping, position as shown in **figure G** and slide the rip fence under the screw from either side of the saw.

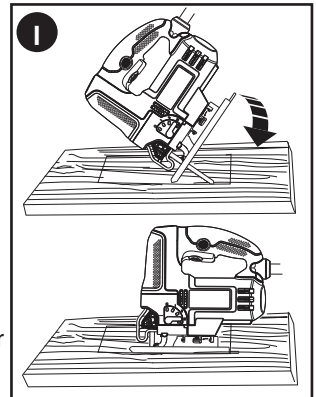


Set the cross bar (12) at desired distance from blade and tighten screw. For ripping, the cross bar should be down and against the straight edge of the workpiece as shown. When circle cutting, adjust rip fence so that distance from blade to hole in fence arm (13) is at the desired radius and tighten screw. Place saw so that hole in fence arm is over center of circle to be cut (drill hole for blade or cut inward from edge of material to get blade into position). When saw is properly positioned, drive a small nail through hole in fence arm. Using rip fence as a pivot arm, begin cutting circle. For circle cutting, the cross bar should be up, as shown in **figure H**.



POCKET CUTTING (FIGURE I)

A pocket cut is an easy method of making an inside cut. The saw can be inserted directly into a panel or board without first drilling a lead or pilot hole. In pocket cutting, measure the surface to be cut and mark clearly with a pencil. Next tip the saw forward until the front end of the shoe sits firmly on the work surface and the blade clears the work through its full stroke. Switch the tool on and allow it to attain maximum speed. Grip the saw firmly and lower the back edge of tool slowly until the blade reaches its complete depth. Hold the shoe flat against the wood and begin cutting. Do not remove blade from cut while it is still moving. Blade must come to a complete stop.



MAINTENANCE

Use only mild soap and damp cloth to clean the tool. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

TROUBLESHOOTING

Problem

- Unit will not start.

Possible Cause

- Cord not plugged in.
- Circuit fuse is blown.

- Circuit breaker is tripped.

- Cord or switch is damaged.

Possible Solution

- Plug tool into a working outlet.
- Replace circuit fuse. (If the product repeatedly causes the circuit fuse to blow, discontinue use immediately and have it serviced at a Porter Cable service center or authorized servicer.)
- Reset circuit breaker. (If the product repeatedly causes the circuit breaker to trip, discontinue use immediately and have it serviced at a Porter Cable service center or authorized servicer.)
- Have cord or switch replaced at a Porter Cable Service Center or Authorized Servicer