

**Instruction Manual  
Manuel d'utilisation  
Manual de Instrucciones**



**324MAG  
325MAG**

**Double Insulated Circular Saw  
Scie circulaire à double isolation  
Sierra Circular con Aislamiento Doble**



**▲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.

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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			
120V	0-25	26-50	51-100	101-150
Ampere Rating	Gauge of wire in AWG units			
From 12 to 16 amps	14	12	Not recommended	

- 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**

**Safety Instructions for All Saws**

**▲DANGER**

- a) **Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.
- b) **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- c) **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.
- d) **Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.

- e) **Hold power tool 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 also make exposed metal parts of the power tool "live" and shock the operator.
- f) **When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- g) **Always use blades with correct size and shape (diamond versus round) of arbor holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- h) **Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.
- i) **Keep your body positioned to either side of the blade, but not in line with the saw blade.** KICKBACK could cause the saw to jump backwards (see Causes and Operator Prevention of Kickback and KICKBACK).
- j) **▲CAUTION:** Blades coast after turn off. Serious personal injury may result.
- k) **Avoid cutting nails. Inspect for and remove all nails from lumber before cutting.**

**CAUSES AND OPERATOR PREVENTION OF KICKBACK:**

- Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.
- When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.
- If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

- l) **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- m) **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.
- n) **When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.
- o) **Support large panels to minimize the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- p) **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- q) **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.
- r) **Use extra caution when making a "plunge cut" into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

**LOWER GUARD SAFETY INSTRUCTIONS**

- s) **Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- t) **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- u) **Lower guard should be retracted manually only for special cuts such as "plunge cuts" and "compound cuts." Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released.** For all other sawing, the lower guard should operate automatically.
- v) **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

**▲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.

**▲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	no.....no 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

**SAVE THESE INSTRUCTIONS**

**MOTOR**

**▲CAUTION:** Be sure your power supply agrees with nameplate marking. 120 Volts AC/DC means your saw will operate on alternating or direct current. As little as 10% lower voltage can cause loss of power and can result in overheating. All Porter Cable tools are factory-tested; if this tool does not operate, check the power supply.

**▲WARNING:** Accessories must be rated for at least the speed recommended on the tool warning label. Accessories running over rated speed can fly apart and cause injury. Accessory ratings must always be above tool speed as shown on tool nameplate.

**▲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.

**▲CAUTION:** Avoid contact with the blade teeth to prevent personal injury.

**OPERATION**

**BLADE SELECTION**

Your Porter-Cable circular saw is designed for use with 7-1/4" diameter blades that have a 5/8" diameter bore. Blades must be rated for 6000 RPM operation (or higher).

**BLADE BRAKE (Model 325MAG only)**

Model 325MAG is equipped with an electric blade brake that energizes automatically when the trigger switch is released.

**REMOVING THE BLADE**

**▲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:** DO NOT USE THE Quick Change™ blade clamp with any product other than specified Porter-Cable tools 324MAG and 325MAG.

**▲CAUTION:** Avoid contact with the blade teeth to prevent personal injury.

**▲CAUTION:** This tool is equipped with a Quick-Change™ blade clamp and is designed to be tightened hand-tight only. The use of external tools may cause damage to the blade clamp.

**▲CAUTION:** Never engage the blade lock while saw is running, or engage in an effort to stop the tool. Never turn the saw on while the blade lock is engaged. Serious damage to your saw will result.

1. Push in the arbor lock button (A) Fig. 1 and rotate the blade by hand until the lock engages the blade arbor.
2. While pressing the arbor lock button, extend the lever on the Quick-Change blade clamp (A) Fig. 2 and turn it counter-clockwise.
3. Remove the Quick-Change blade clamp, release the arbor lock button, and remove the outer blade flange.
4. Retract the lower blade guard (A) Fig. 3 and remove the blade.

**NOTE:** DO NOT use wet lubricants on the Quick-Change blade clamp.

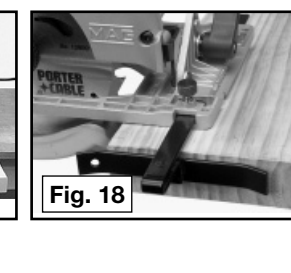
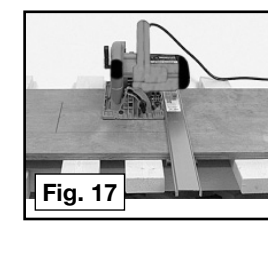
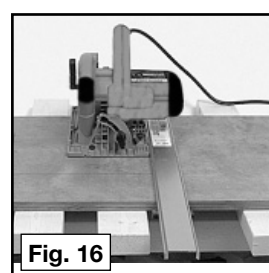
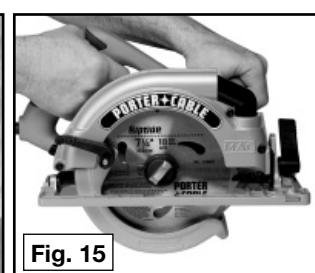
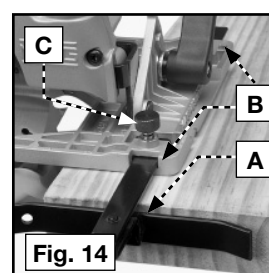
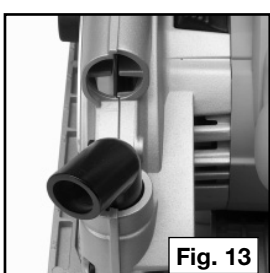
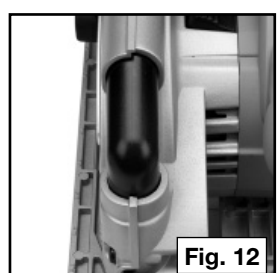
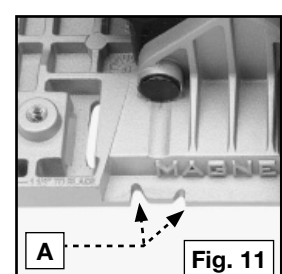
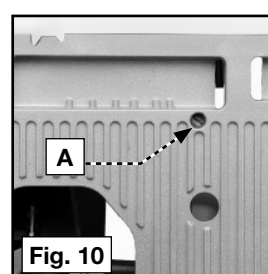
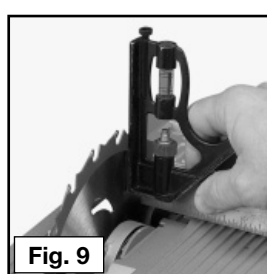
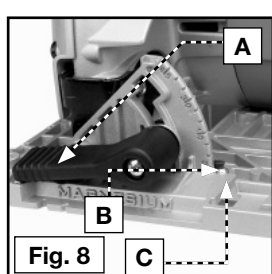
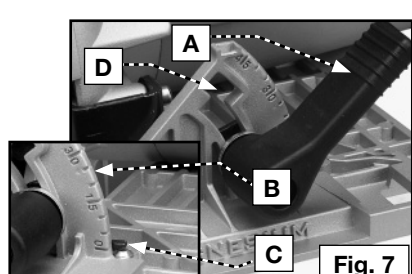
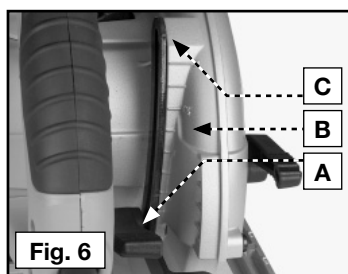
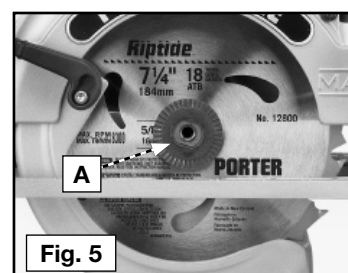
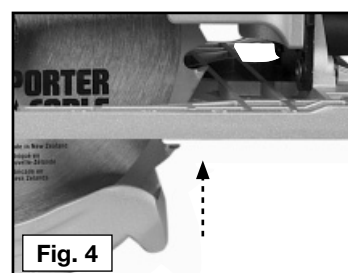
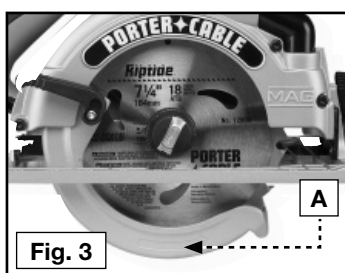
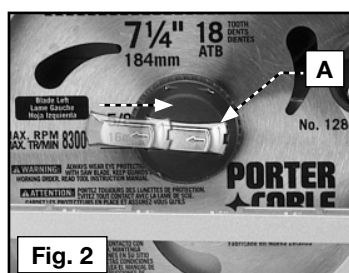
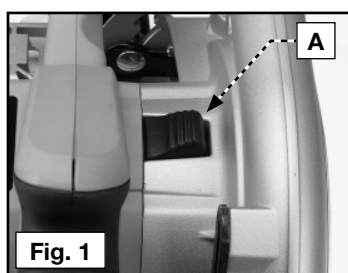
**INSTALLING THE BLADE**

**▲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:** Avoid contact with the blade teeth to prevent personal injury.

1. Remove any accumulated sawdust or other contaminants from the guards, from around the arbor and from the blade clamp. Check the lower blade guard to ensure that it is in working order.
2. Clean the inner blade flange, retract the lower blade guard, and place the new blade on the arbor. Verify that the teeth point up at the front of the saw (Fig. 4).
3. Place the outer blade flange (A) Fig. 5 on the arbor with the smooth side against the blade. Mate the flats with those on the arbor.
4. Replace the Quick-Change blade clamp (A) Fig. 2 finger tight by turning it clockwise. Push in the arbor lock button (A) Fig.1, extend the lever on the Quick-Change blade clamp (A) Fig. 2, and hand-tighten the assembly securely. Release the arbor lock.

**▲CAUTION:** Verify that the Quick Change blade clamp lever is tight and quickly returns to its closed position before connecting the tool to the power source. If it doesn't return, clear the debris from the clamp. Visually inspect the blade clamp lever regularly to ensure that it is not extended during use.



## BLADE

**▲WARNING:** To minimize the risk of eye injury, always wear ANSI Z87.1 approved eye protection. Carbide is a hard but brittle material. Foreign objects in the work piece such as wire or nails can cause tips to crack or break. Only operate saw when proper saw blade guard is in place. Mount blade securely in proper rotation before using, and always use a clean, sharp blade

**▲WARNING:** NEVER cut ferrous metals (those with any iron or steel content), masonry, glass or tile with this saw. Damage to the saw and personal injury may result.

A dull blade will cause inefficient cutting, overload on the saw motor, excessive splintering and increase the possibility of kickback. Change blades when it is no longer easy to push the saw through the cut, when the motor is straining, or when excessive heat is built up in the blade. It is a good practice to keep extra blades on hand so that sharp blades are available for immediate use. Dull blades can be sharpened in most areas; see SAWS-SHARPENING in the yellow pages. Hardened gum on the blade can be removed with kerosene, turpentine, or oven cleaner. Anti-stick coated blades can be used in applications where excessive build-up is encountered, such as pressure treated and green lumber.

## LOWER BLADE GUARD

**▲WARNING:** The lower blade guard is a safety feature which reduces the risk of serious personal injury. Never use the saw if the lower guard is missing, damaged, misassembled or not working properly. Do not rely on the lower blade guard to protect you under all circumstances. Your safety depends on following all warnings and precautions as well as proper operation of the saw. Check lower guard for proper closing before each use as outlined in Additional Safety Rules for Circular Saws. If the lower blade guard is missing or not working properly, have the saw serviced before using. To assure product safety and reliability, repair, maintenance and adjustment should be performed by an authorized PORTER-CABLE service center or other qualified service organization, always using identical replacement parts.

## TO ADJUST DEPTH-OF-CUT FOR NORMAL CUTTING

**▲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.

Adjust the depth-of-cut so that the saw blade barely protrudes through the thickness of the workpiece. To adjust:

1. Lift the depth adjustment locking lever (A) Fig. 6, located at the rear of the saw.
2. Raise or lower the saw housing to the correct level.

**NOTE:** The upper guard (B) Fig. 6 is marked in 1/4" increments for convenience in setting the depth of cut. Align the depth segment mark (C) Fig. 6 with the desired depth marking on the guard.

3. Press the depth-adjusting locking lever down firmly to lock the saw in the selected position.

## TO ADJUST FOR BEVEL CUTS

**▲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.

1. Loosen the bevel-adjusting lever (A) Fig. 7.
2. Tilt the saw base until the desired graduation line on the bevel segment (B) Fig. 7 aligns with the indicator (C) Fig. 7 on the bracket.
3. Tighten the bevel-adjusting lever firmly.
4. For bevel cuts greater than 45°, set the guide on the 45° mark. Lift the bevel-adjusting lever into the slot (D) Fig. 7 and move the saw base to the greater angle. Tighten the bevel-adjusting lever firmly.

## 0° POSITIVE STOP

**▲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.

The saw is equipped with an adjustable positive stop at 0°. Check the accuracy of this stop periodically. To adjust:

1. Loosen the bevel adjustment lever (A) Fig. 8, and position the base for a 0° cut. Confirm that the bevel stop (B) Fig. 8 is against the 0° stop screw (C).
2. Turn the saw upside down, retract the lower blade guard, and check to see that the blade is square to the base (Fig. 9).
3. To adjust, loosen the bevel-adjustment knob (A) Fig. 8. While keeping the bevel stop (B) Fig. 8 in contact with the stop screw (C) Fig. 8, use a screwdriver to turn the adjusting screw (A) Fig. 10 until the blade is square.

## LINE-OF-CUT INDICATOR

Line-of-cut indicator slots (A) Fig. 11 are provided at the front of the saw base. The right slot is used to follow a line when making a 0° cut. The left slot is used to follow a line when making a 45° cut. The straight side of the notch indicates the cut line.

## USING THE EXHAUST NOZZLE

**▲WARNING:** DO NOT direct sawdust toward yourself or others. To avoid injury from flying sawdust, keep the exhaust nozzle either in the forward position or in the closed position. DO NOT insert foreign objects into the exhaust opening.

The exhaust nozzle in the closed position (Fig. 12) directs the sawdust to the rear of the saw. The exhaust nozzle pointing forward (Fig. 13) directs the sawdust to the front. To change the position of the nozzle, push down and turn the nozzle to the new position. An accessory vacuum hose assembly is available for connecting the exhaust nozzle in the forward position directly to a shop-type vacuum cleaner.

## INSTALLING THE OPTIONAL RIP GUIDE

**▲WARNING:** To avoid personal injury and damage to workpiece, extend the rip guide through both slots in the base.

**▲WARNING:** To avoid personal injury and damage to workpiece, extend the rip guide through both slots in the base.

1. Insert the rip guide (A) Fig. 14 through the slots (B). Slide the guide in until it extends through the both slots in the sawbase.
2. Place the compression spring on the thumb screw (C) Fig. 14 (supplied with the rip guide), and thread into the hole in the saw base. **DO NOT TIGHTEN.**
3. Adjust the rip guide for the desired width of cut and tighten the thumb screw.

## HOW TO USE THE SAW

**▲CAUTION:** Do not operate your tool on a current on which the voltage is not within correct limits. Do not operate tools rated AC only on DC current. To do so may seriously damage the tool.

**▲WARNING:** If the guard binds or is sluggish, return the saw to your nearest authorized Porter-Cable service center for repair.

**▲WARNING:** For maximum protection, effective control of this powerful saw requires two-handed operation. support the work properly and hold the saw firmly to prevent loss of control which could cause injury. Refer to Figure 15 for the proper way to hold the saw.

**▲WARNING:** Stay alert and maintain a firm grip on the saw. Release the switch immediately if the blade binds or the saw stalls. Keep your blade sharp. Properly support panels (Fig. 16). Use a fence or a straight edge guide when ripping. DO NOT force the tool. DO NOT remove the saw from the workpiece while the blade is moving.

**▲WARNING:** To help reduce the risk of personal injury, always clamp work. Don't try to hold short pieces by hand! Remember to support cantilevered and over hanging material. Use caution when sawing material from below.

**▲WARNING:** Be sure that the saw is up to full speed before blade contacts material to be cut. Starting the saw with blade against material to be cut or pushed forward into kerf can result in kickback and personal injury.

## KICKBACK

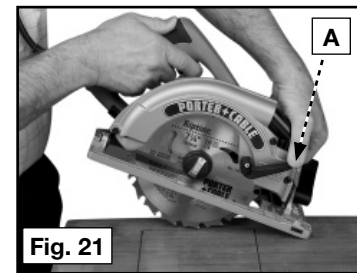
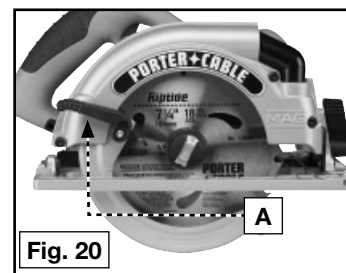
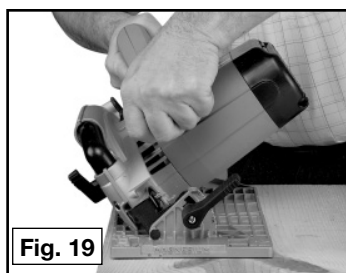
When the saw blade becomes pinched or twisted in the cut, kickback can occur. The saw is thrust rapidly back toward the operator. When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit backward. When the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator. Kickback is more likely to occur when any of the following conditions exist.

### 1. IMPROPER WORKPIECE SUPPORT

- A. Sagging or improper lifting of the cut off piece can cause pinching of the blade and lead to kickback.
- B. Cutting through material supported at the outer ends only can cause kickback. As the material weakens it sags, closing down the kerf and pinching the blade.
- C. Cutting off a cantilevered or overhanging piece of material from the bottom up in a vertical direction can cause kickback. The falling cut off piece can pinch the blade.
- D. Cutting off long narrow strips (as in ripping) can cause kickback. The cut off strip can sag or twist closing the kerf and pinching the blade.
- E. Snagging the lower guard on a surface below the material being cut momentarily reduces operator control. The saw can lift partially out of the cut increasing the chance of blade twist.

### 2. IMPROPER DEPTH OF CUT SETTING ON SAW

To make the most efficient cut, the blade should protrude only far enough to expose 1/2 of a tooth. This allows the shoe to support the blade and minimizes twisting and pinching in the material. See the section titled "Cutting Depth Adjustment."



## 3. BLADE TWISTING (MISALIGNMENT IN CUT)

- A. Pushing harder to cut through a knot, a nail, or a hard grain area can cause the blade to twist.
- B. Trying to turn the saw in the cut (trying to get back on the marked line) can cause blade twist.
- C. Over-reaching or operating the saw with poor body control (out of balance), can result in twisting the blade.
- D. Changing hand grip or body position while cutting can result in blade twist.
- E. Backing up the saw to clear blade can lead to twist if it is not done carefully.

## 4. MATERIALS THAT REQUIRE EXTRA ATTENTION

- A. Wet lumber
- B. Green Lumber (material freshly cut or not kiln dried)
- C. Pressure treated lumber (material treated with preservatives or anti-rot chemicals)

## 5. USE OF DULL OR DIRTY BLADES

Dull blades cause increased loading of the saw. To compensate, an operator will usually push harder which further loads the unit and promotes twisting of the blade in the kerf. Worn blades may also have insufficient body clearance which increases the chance of binding and increased loading.

## 6. LIFTING THE SAW WHEN MAKING BEVEL CUT

Bevel cuts require special operator attention to proper cutting techniques - especially guidance of the saw. Both blade angle to the shoe and greater blade surface in the material increase the chance for binding and misalignment (twist) to occur.

## 7. RESTARTING A CUT WITH THE BLADE TEETH JAMMED AGAINST THE MATERIAL

The saw should be brought up to full operating speed before starting a cut or restarting a cut after the unit has been stopped with the blade in the kerf. Failure to do so can cause stalling and kickback.

Any other conditions which could result in pinching, binding, twisting, or misalignment of the blade could cause kickback. Refer to the sections on "Adjustments And Set-Up" and "Operation" for procedures and techniques that will minimize the occurrence of kickback.

## WORKPIECE SUPPORT

**▲WARNING:** Hands should be kept away from cutting area to reduce the risk of injury.

**▲WARNING:** The power cord should be positioned clear of the cutting area so that it will not get caught or hung up on the work and to prevent electric shock.

To avoid kickback, DO support board or panel NEAR the cut. DON'T support board or panel away from the cut.

**▲WARNING:** When operating the saw, keep the cord away from the cutting area to prevent electric shock.

**▲WARNING:** It is important to support the work properly and to hold the saw firmly to prevent loss of control which could cause personal injury.

**▲WARNING:** Always turn off tool and unplug the tool before making any adjustments or removing or installing attachments or accessories. Such preventative safety measures reduce the risk of starting the tool accidentally.

Place the work with its "good" side - the one on which appearance is most important - down. The saw cuts upward, so any splintering will be on the work face that is up when you saw it.

## CROSS-CUTTING

Cutting directly across the grain of a piece of lumber is called crosscutting. Position the work so that the cut will be on the left.

## RIPPING

Cutting wood lengthwise is referred to as ripping. This operation is performed in the same manner as crosscutting with the exception of supporting the workpiece. If the workpiece is supported on a large table, bench, or floor, place several pieces of scrap stock approximately one inch thick beneath the workpiece to allow clearance for the portion of the saw blade that extends through the material (Fig. 17). When using saw horses, place 2 x 4's lengthwise between the horses and the large sheets of paneling or thin plywood to prevent the workpiece from sagging in the center.

For narrow rip cuts, use the rip guide (available as an accessory). Guide the saw by keeping the inner face of the rip guide (Fig. 18) tight against the edge of the board.

For making wider cuts (plywood and wide sheets), tack or clamp a wooden guide strip to guide the left edge of the saw base (Fig. 17).

**NOTE:** Adjust the depth-of-cut to allow for the thickness of the wooden guide strip.

## BEVEL CUTTING

**▲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:** Use the lever (A) Fig. 20 provided on the lower blade guard when you have to retract the lower blade guard manually.

Bevel cuts are made in the same manner as crosscuts and rip cuts. The difference is that the blade is set at an angle between 0° and 45° (Fig. 19).

The bevel cut made at an angle to the edge of a board is called a compound cut. Certain compound cuts may require you to manually retract the lower blade guard to allow the blade to enter into and/or through the cut.

## POCKET CUTS (PLUNGE CUTTING)

**▲WARNING:** Use the lever (A) Fig. 21 provided on the lower guard when you have to retract the guard manually.

**▲CAUTION:** Keep your hands and fingers away from the blade.

**▲CAUTION:** Let the saw come to a complete stop before removing it from the workpiece.

Start the motor and lower the blade into the work. After the blade has cut through, and the base rests flat on the work, follow the line to the corner.

A pocket cut is one which must be made inside the area of the workpiece and not starting from the edge. Mark the area clearly with lines on all sides. Start near the corner of one side and place the front edge of the saw base firmly on the workpiece. Hold the saw up so that the blade clears the material. Confirm that you have adjusted the blade properly for the depth-of-cut. Push the lower blade guard lever all the way back so the blade is exposed (Fig. 21).

Use a keyhole or bayonet saw to cut clean corners.

## TROUBLESHOOTING

For assistance with your tool, visit our website at [www.porter-cable.com](http://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.

**▲WARNING:** ALWAYS USE SAFETY GLASSES. Everyday eyeglasses 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 respiratory protection.

## REPAIRS

For assistance with your tool, visit our website at [www.porter-cable.com](http://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.









