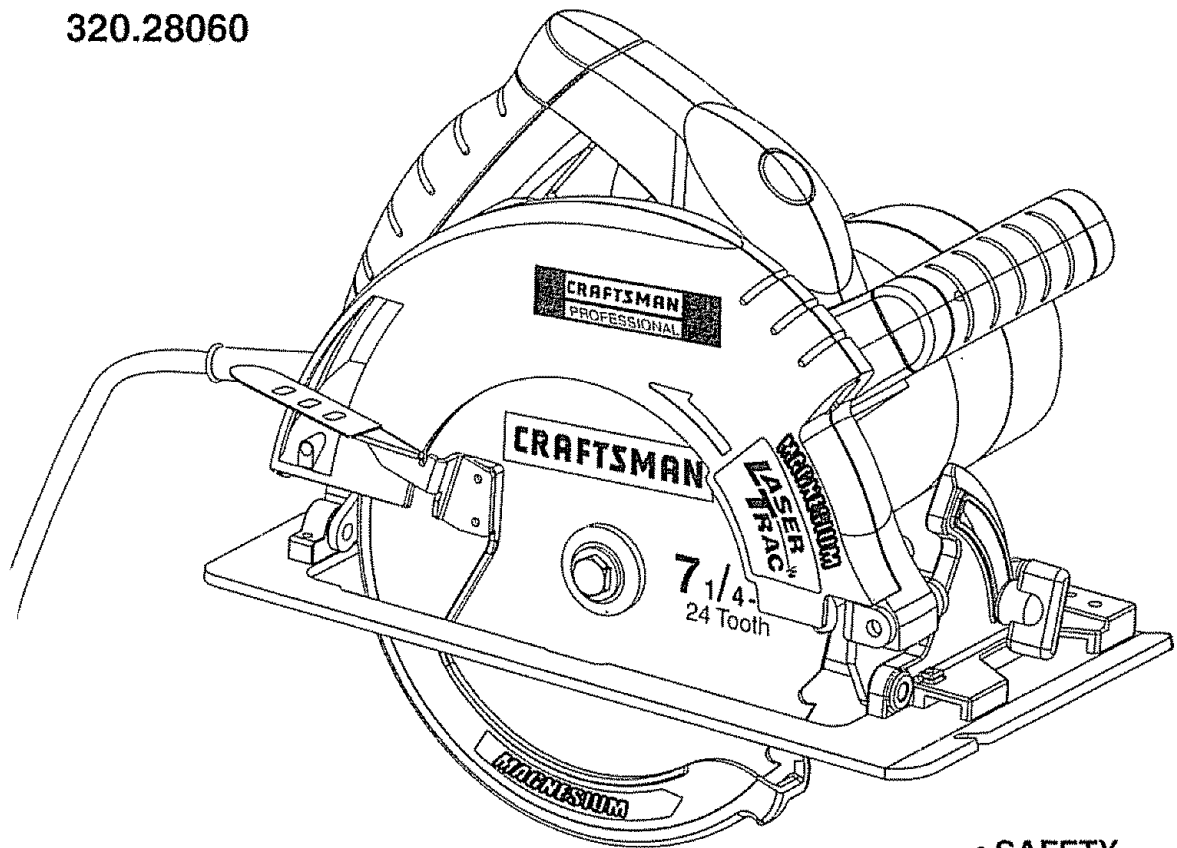


Owner's Manual



7 1/4-in. CIRCULAR SAW with Laser Trac®

Model No.
320.28060



CAUTION: Read, understand and follow all Safety Rules and Operating Instructions in this manual before using this product.

- SAFETY
- ASSEMBLY
- OPERATION
- MAINTENANCE
- ESPAÑOL

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

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ONE FULL YEAR WARRANTY ON CRAFTSMAN PROFESSIONAL CIRCULAR SAW


If this product fails due to a defect in material or workmanship within one year from the date of purchase, **RETURN IT TO THE NEAREST SEARS PARTS AND REPAIR CENTER IN THE UNITED STATES**, and it will be repaired, free of charge.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., Dept. 817 WA, Hoffman Estates, IL 60179

SAVE THESE INSTRUCTIONS!
READ ALL INSTRUCTIONS!

SAFETY INSTRUCTIONS

 **WARNING: BE SURE** to read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.


SAFETY PRECAUTIONS FOR LASER


This saw has a built-in laser light. The laser is a Class IIIa and emits output power of a maximum 1mW and 400nm - 700nm wavelengths. These lasers do not normally present an optical hazard. However, **DO NOT** stare at the beam because it can cause flash blindness.



IMPORTANT: The following label is on your saw. It indicates where the laser light is emitted by the saw. **ALWAYS BE AWARE** of its location when using the saw and **ALWAYS MAKE SURE** that any bystanders in the vicinity of use are made aware of the dangers of looking directly into the laser.

**AVOID EXPOSURE
LASER RADIATION EMITTED
FROM THIS APERTURE**

 **WARNING: LASER LIGHT. LASER RADIATION** Avoid Direct Eye Exposure. Do Not Stare into beam. Only turn laser beam on when tool is on the workpiece. Class 111a.


 **WARNING: DO NOT** stare directly at the laser beam. A hazard may exist if you deliberately stare into the beam. **ALWAYS** follow the following safety precautions when using this saw.

1. The tinted glasses that were included will enhance the laser light in bright light conditions. **DO NOT** wear these glasses if they interfere with the safe operation of this saw.
2. **NEVER** aim the beam at any person or object other than the workpiece.
3. The laser beam can be harmful to the eyes. **ALWAYS** avoid direct eye exposure. **DO NOT** look directly into the laser beam output aperture during operation.
4. The laser on the saw is not a toy. **ALWAYS** keep out of the reach of children. The laser light emitted from this device **SHOULD NEVER** be directed towards any person, for any reason.
5. **ALWAYS** be sure the laser beam is aimed at a sturdy workpiece (such as wood or rough coated surfaces) that does not have a reflective surface

SAFETY INSTRUCTIONS cont.

SAFETY PRECAUTIONS FOR LASER cont.

6. **DO NOT** use on surfaces such as sheet steel that have a shiny, reflective surface. The shiny surface could reflect the beam back at the operator.
7. **ALWAYS** be aware that laser light reflected off of a mirror or any other reflective surfaces can also be dangerous.

 **CAUTION: ALWAYS** follow only the instructions contained in this manual when using this laser. Use of this feature in any manner other than what appears in this manual may result in a hazardous radiation exposure.

8. **DO NOT** attempt to modify the performance of this laser device in any way. This may result in a dangerous exposure to laser radiation.
9. For further information regarding lasers, refer to ANSI - Z136.1
The STANDARD FOR THE SAFE USE OF LASERS, available from the
Laser Institute of America (407) 380-1553.

WORK AREA SAFETY

1. **ALWAYS** 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. **ALWAYS** 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.
2. Double insulation eliminates the need for the three-wire grounded power cord and grounded power supply system. Applicable only to Class II (double insulated) tools.
3. Before plugging in the tool, **BE SURE** that the outlet voltage supplied is within the voltage marked on the tool's data plate. **DO NOT** use "AC only" rated tools with a DC power supply.
4. **ALWAYS** 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.

SAFETY INSTRUCTIONS cont.

ELECTRICAL SAFETY cont.

5. If operating the power tool in damp locations is unavoidable, **ALWAYS** use a Ground Fault Circuit Interrupter to supply power to your tool. **ALWAYS** wear electrician's rubber gloves and footwear in damp conditions.
6. **DO NOT** expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
7. **DO NOT** abuse the cord. **NEVER** use the cord to carry the tools or pull the plug from the outlet. Keep cord away from heat, oil, sharp edges or moving parts. **Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
8. When operating a power tool outside, **ALWAYS** use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock

NOTE: The extension cord must have adequate wire size AWG (American Wire Gauge) for safe, efficient use. Smaller gauge wires, have greater capacity (16 gauge wire has more capacity than 18 gauge wire).

PERSONAL SAFETY

1. **ALWAYS** 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. **ALWAYS** dress properly. **DO NOT** wear loose clothing or jewelry. Pull back long hair. **Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.

SAFETY INSTRUCTIONS cont.

PERSONAL SAFETY cont.

- 3. ALWAYS avoid accidental starting. BE SURE switch is in the "Off" position before plugging in. DO NOT** carry tools with your finger on the switch. Carrying tools with your finger on the switch or plugging in tools that have the switch in the "On" position invites accidents.
- 4. ALWAYS 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. ALWAYS keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- 6. ALWAYS use safety equipment. Always wear eye protection.**

TOOL USE AND CARE SAFETY

- 1. ALWAYS use clamps or other practical ways 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 and blade for your application.** The correct tool and blade 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".** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- 4. ALWAYS 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. ALWAYS store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- 6. ALWAYS 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. ALWAYS 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.

SAFETY INSTRUCTIONS cont.

TOOL USE AND CARE SAFETY cont.


 **WARNING:** USE OF ACCESSORIES THAT ARE NOT RECOMMENDED FOR USE WITH THIS TOOL MAY CREATE A HAZARDOUS CONDITION.

8. **ALWAYS** use only accessories that are recommended for this tool. Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE SAFETY

1. If any part of this saw is missing or should break, bend, or fail in any way; or should any electrical component fail to perform properly: **ALWAYS** shut off the power switch and remove the saw plug from the power source and have the missing, damaged or failed part replaced **BEFORE** resuming operation.
2. **Tool service must be performed only at a Sears Service Center.** Service or maintenance performed by unqualified personnel could result in a risk of injury.

SAFETY RULES FOR CIRCULAR SAWS

 **DANGER!** Keep hands away from cutting area and blade. Keep your second hand on the auxiliary handle or motor housing. If both hands are holding the saw, they cannot be cut by the blade.

1. **ALWAYS** keep your body positioned to either side of the saw blade, but not in line with the saw blade. Kickback could cause the saw to jump backwards (See Kickback... What Causes It and Ways to Prevent It on pages 8-9).
2. **DO NOT** reach underneath the work. The guard cannot protect you from the blade beneath the work.
3. **ALWAYS** check lower guard for proper closing **BEFORE** each use. **DO NOT** operate the saw if the lower guard does not move freely and close instantly. Never clamp or tie the lower guard in the open position. If the saw is accidentally dropped, the lower guard may be bent. Raise the lower guard with the retracting handle. Make sure that it moves freely and does not touch the blade or any other part in all angles and depths of cut.
4. **ALWAYS** check the operation and condition of the lower guard spring. If the guard and the spring are not operating properly, they **MUST** be serviced before use. The lower guard may operate sluggishly, due to damaged parts, gummy deposits, or a buildup of debris.
5. The lower guard should be retracted manually **ONLY** for making special cuts, such as pocket or compound cuts. **ALWAYS** raise the lower guard by retracting the handle. As soon as the blade enters the material, the lower guard **MUST** be released. For all other sawing, the lower guard should operate automatically.
6. **ALWAYS** make sure that the lower guard is covering the blade **BEFORE** placing the saw down on a work bench or floor. An unprotected moving blade will cause the saw to walk backwards, cutting whatever is in its path. Make note of the time it takes for the blade to stop spinning after the switch is released.

SAFETY INSTRUCTIONS cont.

SAFETY RULES FOR CIRCULAR SAWS cont.

7. **NEVER hold the piece being cut in your hands or across your legs.** It is important to support the work properly in order to minimize body exposure, blade binding, or loss of control.
8. **ALWAYS hold 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 make the exposed metal parts of the tool "live" and shock the operator.
9. **When ripping, ALWAYS use a rip fence or straight edge guide.** This improves the accuracy of the cut and reduces the chance of the blade binding.
10. **ALWAYS use blades that have the correct size and shape (diamond vs. round) arbor holes.** Blades that do not match the mounting hardware of the saw will run erratically and will cause loss of control.
11. **ALWAYS BE SURE** that all adjusting screws and the blade holder are fastened tightly **BEFORE** making a cut. Loose adjusting screws and holders can cause the tool or blade to slip and loss of control may result.
12. When removing the blade from the tool, **ALWAYS** avoid contact with skin and **ALWAYS** wear protective gloves when grasping the blade or accessory. Accessories may be hot after prolonged use

KICKBACK...WHAT CAUSES IT AND WAYS TO PREVENT IT

The Causes of Kickback

1. Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, which causes the uncontrolled saw to lift up and out of the workpiece and towards the operator.
2. 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 towards the operator.
3. 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. This causes the blade to climb out of the kerf and jump back towards the operator.
4. Kickback is a result of tool misuse and/or incorrect operating procedures or conditions. It can be avoided by taking the proper precautions, as listed on next page.


SAFETY INSTRUCTIONS cont.

Ways to Prevent Kickback

1. **ALWAYS** maintain a firm grip with both hands on the saw and position your body and arms to allow you to resist **KICKBACK** forces. **KICKBACK** forces can be controlled by the operator, if the proper precautions are taken.
 2. If the blade is binding, or when you are interrupting a cut for any reason, **ALWAYS** 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. **ALWAYS** check and be ready to take corrective action to eliminate the cause of blade binding.
 3. When restarting the saw in the workpiece, **ALWAYS** center the blade in the kerf and check to be sure that the saw teeth are not engaged into the material. If the saw blade is binding, it may walk up or **KICKBACK** from the workpiece when the saw is restarted.
 4. **ALWAYS** 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.
 5. **DO NOT** use a dull or damaged blade. Unsharpened or improperly set blades produce narrow kerf which causes excessive friction, blade binding and **KICKBACK**.
 6. **ALWAYS** be sure that the blade depth and adjusting locking levers are tight and secure **BEFORE** making a cut. If blade adjustment shifts while cutting, it may cause binding and **KICKBACK**.
 7. **ALWAYS** use extra caution when making a "Pocket Cut" into existing walls or other blind areas. The protruding blade may cut objects that can cause **KICKBACK**.
 8. **ALWAYS** have saw blade at full speed before contacting workpiece
 9. **ALWAYS** hold 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 make the exposed metal parts of the tool "live" and shock the operator.
- IMPORTANT:** See Operation Section of this Manual for additional instructions for avoiding Kickback.

SAFETY INSTRUCTIONS cont.

ADDITIONAL RULES FOR SAFE OPERATION

 **WARNING:** BE SURE to read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

1. Know your power tool. Read operator's manual carefully. Learn the applications and limitations, as well as the specific potential hazards related to this tool.
2. ALWAYS wear safety glasses or eye shields when using this saw. Everyday eyeglasses have only impact-resistant lenses; they are NOT safety glasses.
3. ALWAYS protect your lungs. Wear a face mask or dust mask if the operation is dusty.
4. ALWAYS protect your hearing. Wear hearing protection during extended periods of operation.
5. ALWAYS inspect the tool cords periodically and if damaged have them repaired at your nearest Sears Service Center or other Authorized Service Facility. ALWAYS be aware of the cord location.
6. ALWAYS check for damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine if it will operate properly and perform its intended function. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. A guard or other part that is damaged, should be properly repaired or replaced at a Sears Service Center.
7. DO NOT abuse the cord. NEVER use the cord to carry the tool or pull the plug from the outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
8. ALWAYS make sure that your extension cord is in good condition. When using an extension cord be sure to use one that is heavy enough to carry the current that your tool will draw. A wire gauge (AWG) of at least 14 is recommended for an extension cord 25 feet or less in length. When working outdoors ALWAYS use an extension cord that is suitable for outdoor use. The cord's jacket will be marked WA. **Smaller gauge wires, have greater capacity (16 gauge wire has more capacity than 18 gauge wire).** An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating

SAFETY INSTRUCTIONS cont.

ADDITIONAL RULES FOR SAFE OPERATION cont.

9. ALWAYS inspect and remove all nails from lumber before sawing.
10. DO NOT use the tool while tired or under the influence of drugs, alcohol or any medication.
11. SAVE THESE INSTRUCTIONS. Refer to them frequently and use them to instruct others who may use this tool. If someone borrows this tool, make sure they have these instructions also.



⚠ WARNING: The operation of any circular saw can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, **ALWAYS** wear safety goggles or safety glasses with side shield and a full face shield when needed. We recommend A Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shield, available at Sears Retail Stores.

⚠ WARNING: Some dust particles created by power sanding, sawing, grinding, drilling and other construction jobs contains chemicals known to cause cancer, birth defects or other reproductiveharm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending upon how often you do this type of work. To reduce your exposure to these chemicals:

- Work in a well-ventilated area.
- Work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

The label on your tool may include the following symbols.

V	.....	Volts
A	.....	Amperes
Hz	.....	Hertz
W	.....	Watts
min	.....	Minutes
~	.....	Alternating current
—	.....	Direct current
no	.....	No-load speed
☐	.....	Class II construction
/min	.....	Revolutions or Strokes per minute
⚠	.....	Indicates danger, warning or caution. It means attention! Your safety is involved.

IMPORTANT! READ ALL INSTRUCTIONS

ASSEMBLY

UNPACKING

Your circular saw has been shipped completely assembled, except for the blade which is packed unassembled. Inspect the saw carefully to make sure that no breakage or damage has occurred during shipping. If any parts are damaged or missing return the saw to your nearest Sears Store to have it replaced.

⚠ WARNING: If any parts are missing, **DO NOT** operate this saw until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

MOUNTING THE BLADE TO SAW

Carefully remove the blade from its packing and thoroughly inspect it to be sure that it is not cracked or damaged.

⚠ WARNING: Your saw should **NEVER** be connected to the power source when you are assembling parts, making adjustments, installing or removing blades, cleaning or when it is not in use. Disconnecting the saw will prevent accidental starting, that could cause serious personal injury.

⚠ WARNING: A 7 1/4-inch blade is the maximum blade capacity of your saw. A larger than 7 1/4-inch blade will come in contact with the blade guards. Also, **NEVER** use a blade that is so thick that it prevents the outer blade washer from engaging with the flat side of the spindle. Blades that are too large or too thick can result in an accident causing serious personal injury.

Your saw has a spindle lock button for locking the spindle on your saw in a stationary position. Push and hold the spindle lock button when mounting, changing or removing the blade.

1. Remove blade wrench from base.
2. Place saw on its side on a flat surface.
3. Firmly hold down spindle lock button, and use blade wrench to loosen blade screw by turning it in a counterclockwise direction. Completely remove blade screw (See Fig. 1).
4. Remove outer "D" washer (See Fig. 1).
5. The part remaining is the inner bushing (See Fig. 1). It does not need to be removed.
6. Wipe a drop of oil onto the inner bushing and outer "D" washer where they will touch blade.
7. Place the saw blade inside the lower blade guard, onto the spindle and against the inner bushing (See Fig. 1).

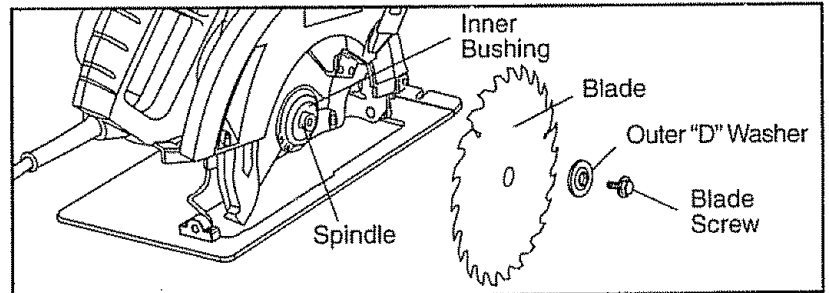
NOTE: The teeth of the blade should point upward at the front of the saw as shown in Fig. 1.

8. Place saw on the edge of a flat surface so the blade is not in contact with anything.
9. Raise lower blade guard using the blade guard handle and hold it in the raised position for the next steps.

ASSEMBLY cont.

MOUNTING THE BLADE TO SAW cont.

10. Replace the "D" washer (See Fig. 1).
11. Firmly hold down spindle lock button as you replace blade screw and hand tighten it in a clockwise direction (See Fig. 1). Then use blade wrench to tighten blade screw thoroughly.



12. Place blade wrench back in base.

NOTE: Always place angled portion of blade wrench upwards.

IMPORTANT: NEVER use a blade that is too thick to allow the "D" washer to engage with the flat side of the spindle.

REMOVING THE BLADE

1. Unplug the saw.

⚠ WARNING: Failure to unplug the saw could result in accidental starting causing possible serious personal injury.

2. Raise the lower blade guard using the guard handle, hold down the spindle lock button.
3. Follow Steps 1 through 4 on Mounting Blade to Saw, but **DO NOT** hold down the spindle lock button.
4. Carefully remove blade.

DESCRIPTION

KNOW YOUR SAW (See Fig. 2)

Your circular saw has many built-in convenience features for fast, efficient cutting. These features include the laser beam that projects a line of light along the cutting line for accurate cutting. It also has easy-to-operate adjustments for depth-of-cut and bevel cutting.

Electrical Connection

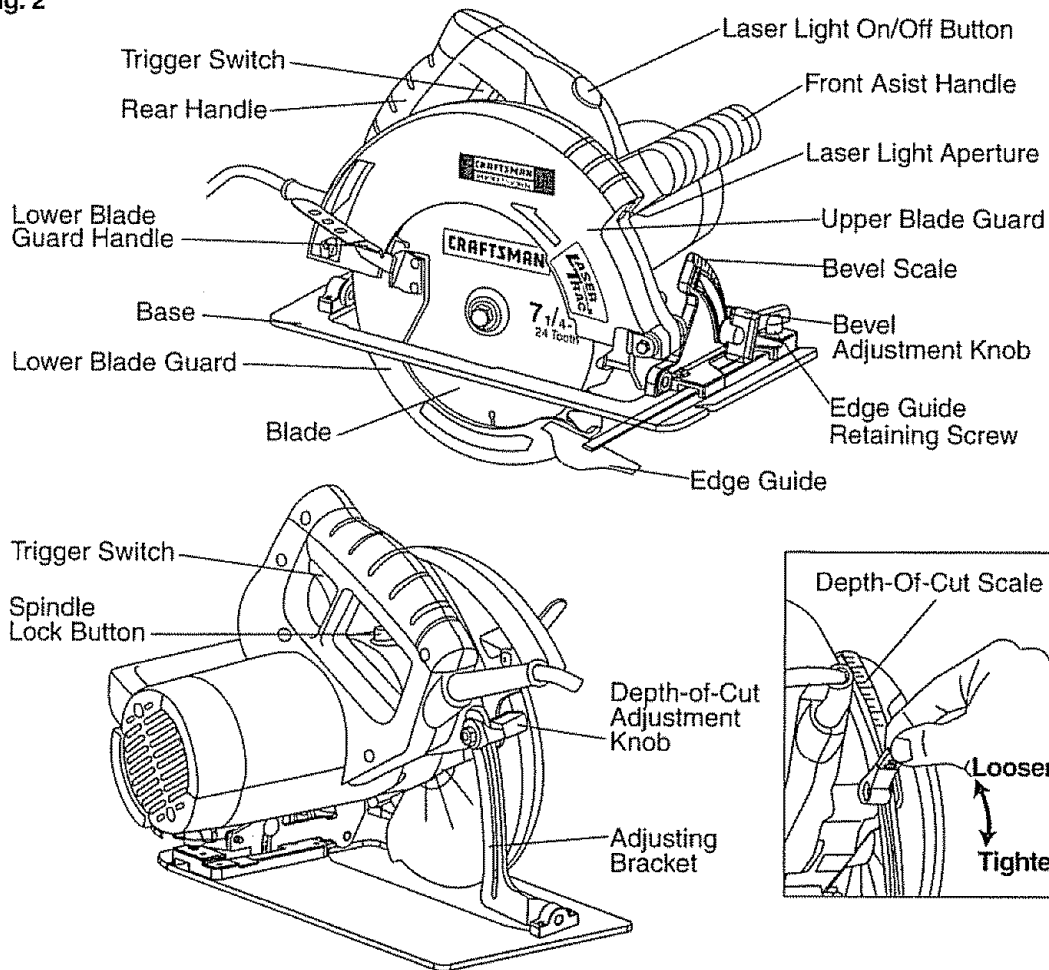
Your circular saw has a precision-built electric motor and it should only be connected to a 120-volt, 60-Hz. power supply (normal household current). **DO NOT** operate on direct current (DC). This large voltage drop will cause a loss of power that will overheat the motor. If your saw does not operate when plugged into an outlet, check the power supply.

Trigger Switch

To turn on the saw, squeeze the trigger switch. When you have finished sawing, release switch to shut saw off.

DESCRIPTION cont.

Fig. 2



PRODUCT SPECIFICATIONS

Input	15 Amps
Blade Diameter	7 1/4 in. (184mm)
Blade Arbor	5/8-in. (16mm)
Cutting Depth at 90°	2 7/16 in. (61.97mm)
Cutting Depth at 45	1 13/16 in. (47.24mm)
Maximum Bevel Angle	54.5°
Rating	120 volts, 60 Hz AC
No Load Speed	5000 RPM

OPERATION

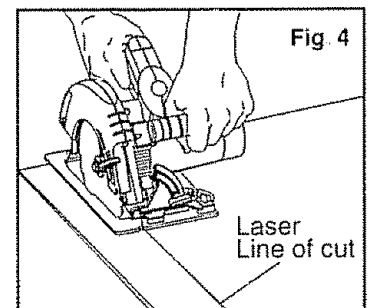
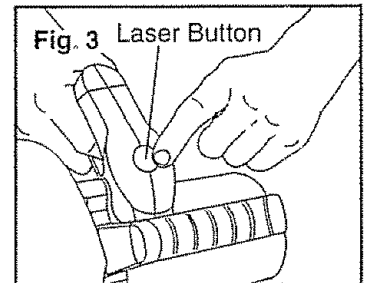
⚠ CAUTION: DO NOT let familiarity with your saw make you careless. Remember that a careless fraction of a second is sufficient to cause severe injury.

Before attempting to use any tool, be sure to familiarize yourself with all the operating features and safety instructions.

Using the Laser Light Feature (see Figs. 3 & 4)

⚠ WARNING: DO NOT stare directly at the laser beam. **NEVER** aim the light at any person or object other than the workpiece.

1. The tinted glasses that were included will enhance the laser light in bright light conditions. **DO NOT** wear these glasses if they interfere with the safe operation of this saw.
2. **DO NOT** turn the laser beam on until the saw is on the workpiece.
3. Mark the line of cut on the workpiece.
4. Adjust the cutting angle and cutting depth as needed.
5. Plug in the saw and push button to turn on laser. (See Fig. 3)
6. Align laser beam with line-of-cut (See Fig. 4)
7. Squeeze the trigger switch and slowly push the saw forward using both hands. Keep the red laser light beam on the line-of-cut.
8. **ALWAYS** shut off the laser light when you have finished cutting.



OPERATION cont.

SAW BLADES

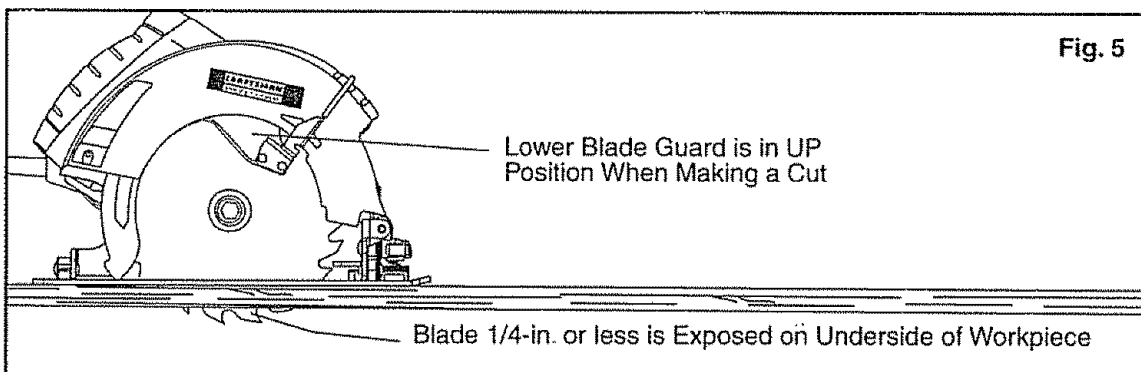
All saw blades need to be kept clean, sharp and properly set in order to cut efficiently. Using a dull blade places a heavy load on the saw and increases the danger of kickback. Keep extra blades on hand, so sharp blades are always available. Gum and wood pitch hardened on the blade slows the saw down. Use gum and pitch remover, hot water or kerosene to remove them. **DO NOT** use gasoline.

BLADE GUARD SYSTEM

The lower blade guard, attached to your circular saw, is there for your protection and safety. It should **NEVER** be altered for any reason. If it becomes damaged or begins to return slowly or sluggishly, **DO NOT** operate your saw until the damage has been repaired or replaced. **ALWAYS** leave the guard in its correct operating position when using the saw.

⚠ DANGER: When sawing through a workpiece, the lower blade guard does not cover the blade on the underside of the workpiece (see Fig. 5). Since the blade is exposed on the underside of the workpiece, **ALWAYS** keep your hands and fingers away from the cutting area. Any part of your body coming in contact with the moving blade will result in serious injury.

⚠ CAUTION: NEVER use the saw when the guard is not operating properly. The guard should be checked for correct operation before each use. If you drop your saw, check the lower blade guard and bumper for damage at all depth settings before using. **NOTE:** The guard is operating properly when it moves freely and then readily returns to the closed position. If, for any reason, your lower blade guard does not close freely, take it to your nearest Sears Repair Center for service before using it.



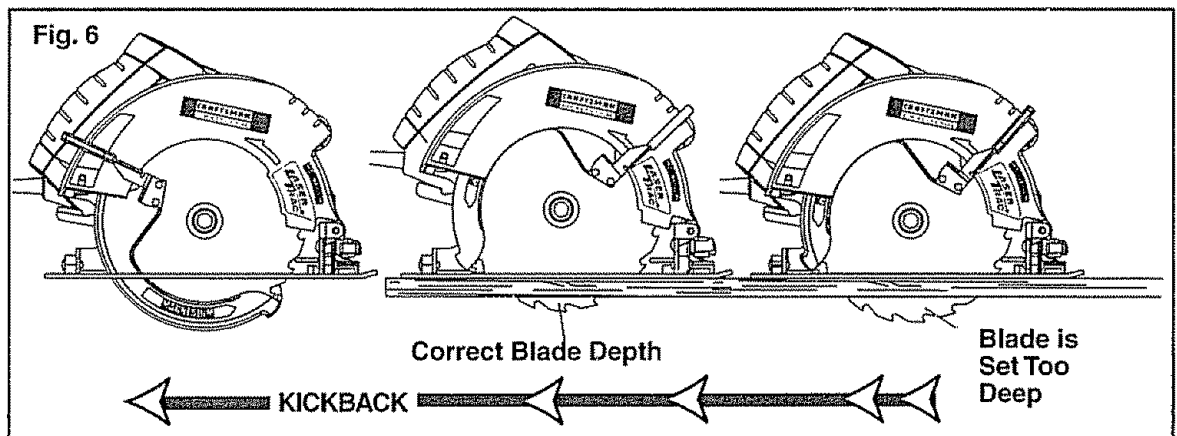
OPERATION cont.

KICKBACK

Kickback occurs when the blade stalls rapidly and the saw is driven back towards you. Blade stalling is caused by any action which pinches the blade in the wood.

IMPORTANT: The best guard against kickback is to avoid dangerous practices.

⚠ DANGER: ALWAYS release trigger switch immediately if the blade binds or the saw stalls. Kickback could cause you to lose control of the saw. Loss of control can lead to serious injury.

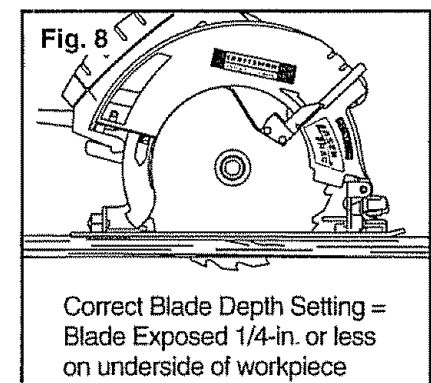
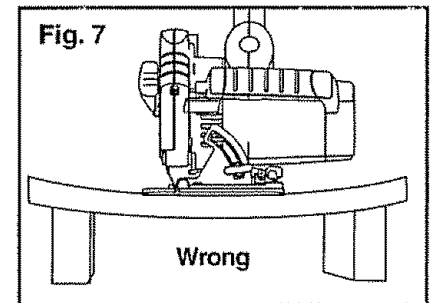


Kickback is Caused By:

1. Incorrect Blade Depth Setting (See Fig. 6 and 8).
2. Sawing into knots or nails in the workpiece.
3. Twisting the blade while making a cut.
4. Making a cut with a dull, gummed up, or improperly set blade.
5. Not providing proper support for workpiece (See Fig. 7).
6. Forcing a cut.
7. Cutting warped or wet lumber.
8. Tool misuse or incorrect operating procedures.
9. Contacting the workpiece with blade at less than full speed.

To Lessen the Chance of Kickback:

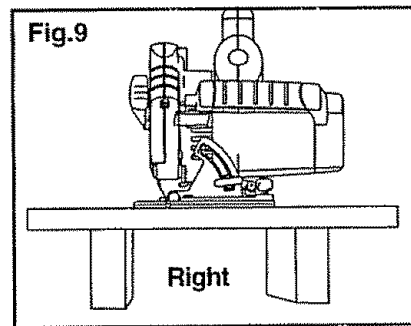
1. **ALWAYS** use the correct blade depth setting. The correct blade depth setting for all cuts should not be more than 1/4-inch below the material to be cut (see Fig. 8).



OPERATION cont.

To Lessen the Chance of Kickback: cont.

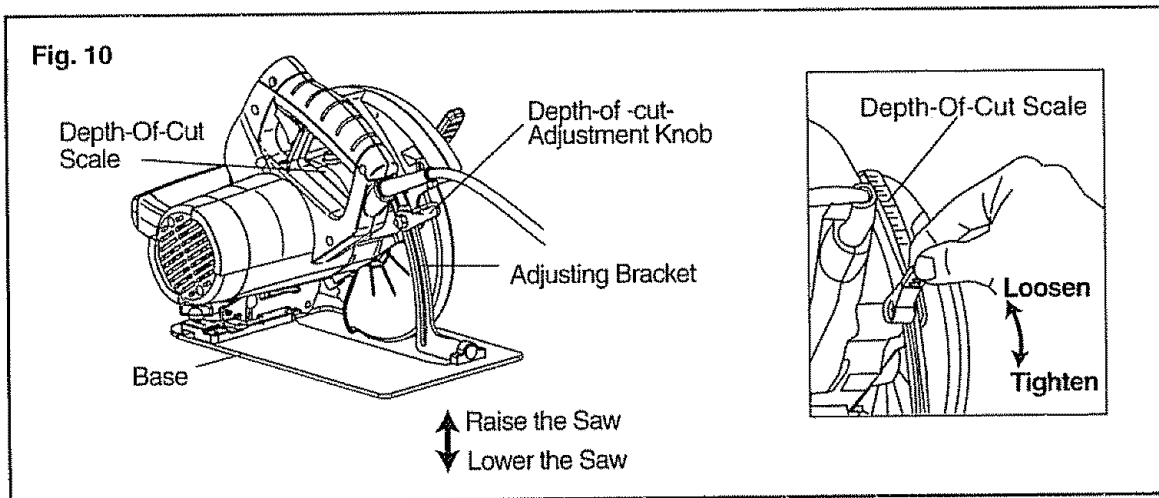
2. **ALWAYS** inspect the workpiece for knots or nails **BEFORE** beginning to cut.
NEVER saw into a knot or nail.
3. Make straight cuts. **ALWAYS** use a straight edge guide when rip cutting.
This will help prevent twisting the blade in the cut.
4. **ALWAYS** use clean, sharp and properly set blades.
NEVER make cuts with dull blades.
5. **ALWAYS** properly support the workpiece before beginning a cut. This will help you avoid pinching the blade. The right and wrong ways to support large workpieces are shown in Figures 8 and 9.
6. **ALWAYS** use steady, even pressure when making a cut. **NEVER** force the cut.
7. **DO NOT** cut wet or warped lumber.
8. **ALWAYS** hold the saw firmly with both hands and keep your body in a balanced position. This will help you resist the force of kickback, should it occur.



IMPORTANT: When using your saw, **ALWAYS** stay alert and exercise control. **DO NOT** remove your saw from the workpiece, while the blade is moving.

DEPTH-OF-CUT ADJUSTMENT

ALWAYS use the correct blade depth setting. The correct blade depth setting for all cuts should not be more than 1/4-inch below the material being cut. Allowing more depth will increase the chance of kickback and cause the cut to be rough. Your saw is equipped with a depth-of-cut scale on the upper blade guard that will provide increased depth-of-cut accuracy (See Fig. 10).



OPERATION cont.

TO ADJUST BLADE DEPTH

1. Unplug the saw.

⚠ WARNING: Failure to unplug the saw could result in accidental starting causing possible serious personal injury.

2. Raise depth adjust lever to loosen. (See Fig. 10).
3. Determine the desired depth of cut.
4. Locate the depth-of-cut scale on the back of the upper blade guard.
5. Hold the base of the saw flat against the edge of workpiece and then raise or lower the saw until the indicator mark on the bracket aligns with the notch on the blade guard
6. Tighten depth adjust lever.

STARTING A CUT

1. **ALWAYS** use your saw with your hands positioned correctly (See Fig. 11).

⚠ WARNING: ALWAYS maintain proper control of the saw to make sawing safer and easier. Loss of control of the saw could cause an accident resulting in possible serious injury

NEVER use the saw with your hands positioned as shown in Fig. 12!

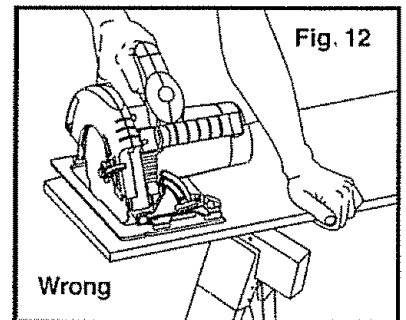
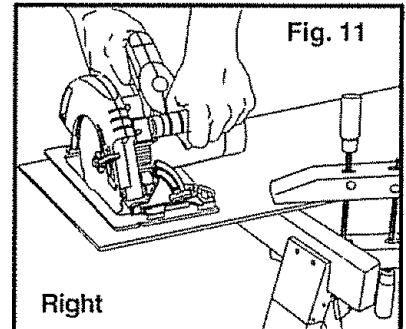
TO HELP MAINTAIN CONTROL

1. **ALWAYS** support the workpiece near the cut.
2. **ALWAYS** support the workpiece so the cut will be on your right.
3. **ALWAYS** clamp the workpiece so it will not move during the cut. Place the workpiece with the good side down.

NOTE: The good side is the side where appearance is important.

Before starting a cut, draw a guideline along the desired line of cut. Then place the front edge of the saw base on that part of the workpiece, that is solidly supported (See Fig 11)

4. **NEVER** place the saw on the part of the workpiece that will fall off when the cut is made (See Fig 12)
5. **ALWAYS** keep the cord away from the cutting area. **ALWAYS** place the cord so it does not hang up on the workpiece when making a cut.



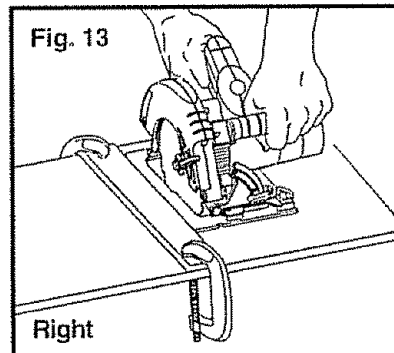
OPERATION cont.

TO HELP MAINTAIN CONTROL cont.

⚠ WARNING: If the cord hangs up on the workpiece during a cut, release the trigger switch immediately. To avoid injury, unplug the saw and move the cord to prevent it from hanging up again.

⚠ DANGER: Using the saw with a damaged cord could result in serious injury or death. If the cord has been damaged, have it replaced before using the saw again.

6. Hold the saw firmly with both hands (See Fig. 13).
7. Squeeze the trigger switch to start the saw. **ALWAYS** let the blade reach full speed before you begin the cut into the workpiece.
8. When making a cut, **ALWAYS** use steady, even pressure. Forcing the saw causes rough cuts and could shorten the life of the saw or cause kickback.
9. After completing your cut, release the trigger switch and allow the blade to come to a complete stop. **DO NOT** remove the saw from the workpiece while the blade is moving.



⚠ DANGER: When sawing through the workpiece, the lower blade guard does not cover the blade. The blade is exposed on the under side of the workpiece. **ALWAYS** keep your hands and fingers away from the cutting area. Any part of your body coming in contact with the moving blade will result in serious injury.

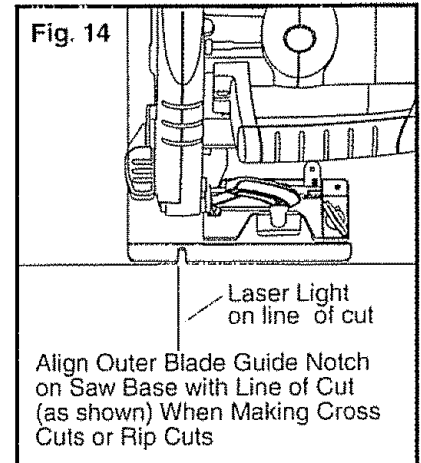
⚠ CAUTION: Whenever you lift your saw from the workpiece, the blade is exposed on the under side of the saw until the lower blade guard closes. **ALWAYS MAKE SURE** that the lower blade guard is closed before setting the saw down on work surface.

⚠ WARNING: If the blade comes in contact with the workpiece before it reaches full speed, it could cause the saw to kickback towards you, resulting in serious injury.

OPERATION cont.

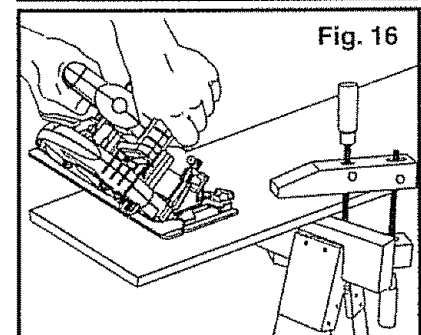
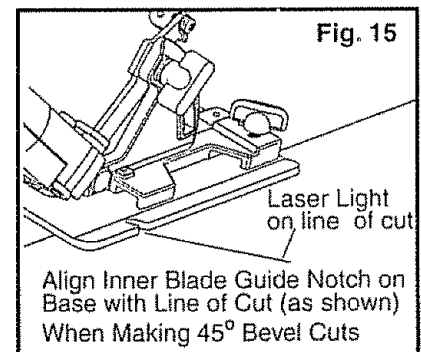
MAKING CROSS CUTS OR RIP CUTS

1. When making cross or rip cuts, align your line of cut with the outer blade guide notch on the base of the saw (See Fig. 14).
2. Since blade thicknesses vary, **ALWAYS** make a trial cut in scrap material along the guideline to determine how much, if any, the guideline must be offset to get an accurate cut.



MAKING BEVEL CUTS

1. Your saw can be adjusted to cut at any angle between 0° and 54.5°. When making 45° bevel cuts, there is a notch in the saw base to help you line up the blade with the line of cut (See Fig. 15).
2. Align your line of cut with the inner blade guide notch on the base of the saw when making 45° bevel cuts
3. Since blade thicknesses vary and different angles require different settings, **ALWAYS** make a trial cut in scrap materials along a guideline to determine how much you should offset the blade from the guideline to make an accurate cut.
4. When making a bevel cut **ALWAYS** hold your saw firmly with both hands (See Fig. 16).
5. Rest the front edge of the base on the workpiece. Then squeeze the trigger switch to start the saw. **ALWAYS** let the blade reach full speed, then guide the saw into the workpiece.
6. After completing your cut, release the trigger switch and allow the blade to come to a complete stop. **DO NOT** remove the saw from the workpiece while the blade is moving



⚠ WARNING: If the blade comes in contact with the workpiece before it reaches full speed, it could cause the saw to kickback towards you, resulting in serious injury

OPERATION cont.

TO ADJUST THE BEVEL SETTING

1. Unplug the saw.

⚠ WARNING: Failure to unplug the saw could result in accidental starting causing possible serious personal injury.

2. Loosen bevel adjustment knob (See Fig. 17).
3. Raise the motor housing end of the saw until you reach the desired angle setting on the bevel scale (See Fig. 17).
4. Tighten Knob securely.

⚠ WARNING: Attempting a bevel cut without the knob being securely tightened can result in serious injury.

POSITIVE 0° BEVEL STOP (See Fig. 17)

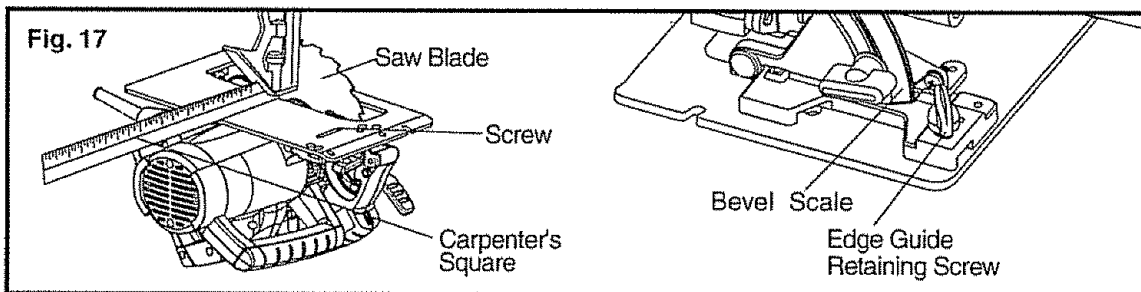
Your saw has a positive 0° bevel stop, it was adjusted at the factory to assure 0° angle of the saw blade for 90° cuts. However shipping can cause misalignment.

To Check

1. Unplug the saw.

⚠ WARNING: Failure to unplug the saw could result in accidental starting causing possible serious personal injury.

2. Place saw in an upside down position on workbench (See Fig. 17).
3. Use a carpenter's square to check the squareness of the saw blade to the base on your saw.



To Adjust

1. Unplug the saw.

⚠ WARNING: Failure to unplug the saw could result in accidental starting causing possible serious personal injury.

2. Loosen bevel adjustment knob.
3. Loosen screw and adjust base until square with saw blade .
4. Tighten screw and knob securely.

⚠ WARNING: Attempting to make cuts without knob securely tightened can result in serious injury.

OPERATION cont.

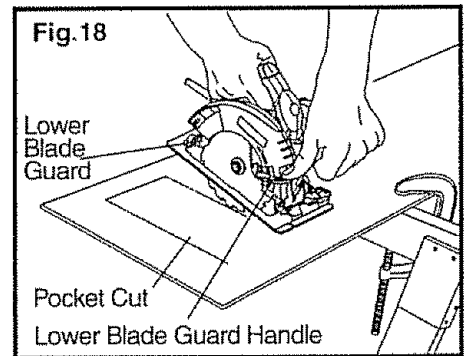
TO MAKE POCKET CUTS

⚠ WARNING: ALWAYS adjust bevel setting to zero before making a pocket cut. Attempting a pocket cut at any other setting can result in a loss of control of the saw, possibly causing serious injury.

1. Adjust the bevel setting to zero, set the blade to the correct blade depth setting, and use the lower blade guard handle to swing the guard up.

⚠ WARNING: ALWAYS raise the lower blade guard with the handle to avoid serious injury.

2. While holding the lower blade guard by the handle, firmly rest the front of the base flat against the workpiece with the rear handle raised so the blade does not touch the workpiece (See Fig. 18).
3. Squeeze the trigger switch to start the saw. **ALWAYS** let the blade reach full speed, then slowly lower the blade onto the workpiece until the base is flat against the workpiece.
4. After you complete the cut, release the trigger switch and allow the blade to come to a complete stop. After the blade has stopped, remove it from the workpiece. If the corners of your pocket cut are not completely cut through, use a hand saw or sabre saw to finish.



⚠ WARNING: NEVER tie the lower blade guard in the raised position. Leaving the blade exposed could result in serious injury.

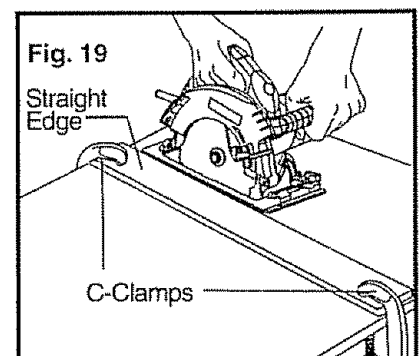
MAKING RIP CUTS

ALWAYS use a guide when making long or wide rip cuts with your saw. You can use either a straight edge or use the edge guide that was included with your saw.

Using a Straight Edge

You can make an efficient rip guide by clamping a straight edge to your workpiece. (See Fig. 19)

1. Secure the workpiece
2. Use C-clamps to firmly attach straight edge to the workpiece
3. Carefully guide the saw along the straight edge for a straight rip cut.
4. **DO NOT** bind the blade in the cut.



OPERATION cont.

MAKING RIP CUTS cont.

Using The Edge Guide

Your saw comes with an edge guide that allows you to make parallel cuts in a sheet of wood.

To Attach the Edge Guide

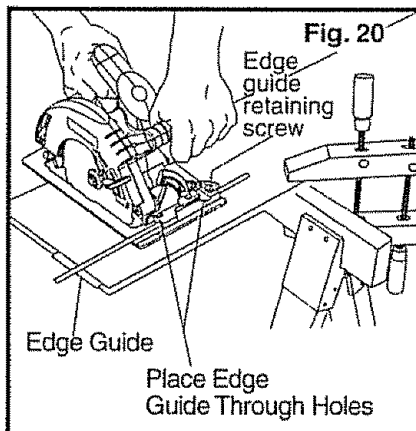
1. Unplug the saw.

⚠ WARNING: Failure to unplug the saw could result in accidental starting causing possible serious personal injury.

2. Place edge guide through holes in base of saw (See Fig.20.)
3. Adjust edge guide to the desired length of cut.
4. Tighten the edge guide retaining screw.


Using the Edge Guide

1. Place the face of the guide firmly against the edge of the workpiece. Doing this will give you a true cut without pinching the blade.
2. **BE SURE** that guiding edge of the workpiece is straight so you can get a straight cut
3. Carefully guide the saw along the guide for a straight rip cut.
4. **DO NOT** bind the blade in the cut.



MAINTENANCE

SERVICE

 **WARNING:** Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components, which could cause a serious hazard.

 **WARNING:** To avoid accidents, **ALWAYS** disconnect the tool from the power source **BEFORE** cleaning or performing any maintenance.

- All service that requires opening the saw **MUST** only be performed by a Sears Service Center. All motor part represent an important part of the double insulation system and **MUST** only be serviced by a Sears Service Center. Service performed by unqualified personnel could result in a risk of injury
- When servicing this tool, **ALWAYS** 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 electrical shock or injury.
- Avoid solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc.
- It is a known fact that electric tools are subject to accelerated wear and possible premature failure when they are used to work on fiber glass boats and sports cars, wallboard, spackling compounds or plaster. The chips and grindings from these materials are highly abrasive to electrical tool parts, such as bearings, brushes, commutators, etc. Consequently, it is not recommended that this tool be used for extended work on any fiber glass material, wallboard, spackling compound, or plaster. During any use on these materials, it is extremely important that the tool is cleaned frequently by blowing with an air jet.

LUBRICATION

All of the bearings in this tool are lubricated with a sufficient amount of high-grade lubricant for the life of the tool under normal operating conditions. Therefore, no further lubrication is required.

ACCESSORIES

The following recommended accessories are currently available at your local Sears Store.

⚠ WARNING: The use of attachments or accessories that are not recommended might be dangerous and could result in serious injury.

EXTENSION CORDS

Sears offers a large selection of extension cords that help extend your working range.

The use of any extension cord will cause some loss of power. To keep the loss at a minimum and to prevent overheating, use an extension cord that is heavy enough to carry the current that the tool will draw.

A wire gauge (AWG) of at least 14 is recommended for an extension cord 25 feet or less in length. When working outdoors **ALWAYS** use an extension cord that is suitable for outdoor use. The cord's jacket will be marked WA.

⚠ CAUTION: Keep extension cords away from the cutting area, and position the cord so it will not get caught on lumber, tools, etc. during the cutting operation.

⚠ WARNING: Check extension cords before each use. If damaged, replace it immediately. **NEVER** use a tool with a damaged cord because touching the damaged area could cause electrical shock, resulting in serious injury.

BLADES

Sears has a large selection of circular saw blades for fast, efficient cutting in a variety of materials and applications.

7 1/4-in. 40-Tooth General-Purpose Cut-Off Blade
7 1/4-in. 35-Tooth Master Combination Blade
7 1/4-in. 200-Tooth Plywood Blade
7 1/4-in. 18-Tooth Carbide Blade
7 1/4-in. 18-Tooth Mach II Silver Series Carbide Blade
7 1/4-in. 24-Tooth Mach II Silver Series Carbide Blade
7 1/4-in. 24-Tooth Combination Carbide Blade

Sears also offers Combination Squares, Framing Squares and various length Edge Guides to help you with all your cutting needs

CIRCULAR SAW WITH LASER TRAC – MODEL NUMBER 320.28060

The Model Number will be found on the Nameplate.
Always mention the Model Number when calling about your tool.

No.	Part No.	Description	Quantity	No.	Part No.	Description	Quantity
1	T011421951	Tapping Screw	9	27	L09321201	Lock Spring	1
2	L01321211	Back Cover	1	28	DSCS12061	Laser Set	1
3	T011504055	Screw	3	29	T04030302	Washer	2
4	T011429521	Tapping Screw	4	30	T04030905	Spring Washer	2
5	L08321202	Brush Holder Clamp	2	31	T020301231	Screw	2
6	L00321902	Brush Holder	2	32	L06320104	Bolt	1
7	L07321903	Brush	2	33	L02320104	Rubber Stopper	1
8	T04040303	Washer	3	34	L04320909	Washer	1
9	L01321210	Front Handle	1	35	L09321202	Spring	1
10	T04050305	Washer	1	36	T013501255	Screw	3
11	T011501655	Screw	1	37	DSCS1905	Gear Case Cover Set	1
12	L01321201	Motor Housing	1	38	L99320101	Guide	1
13	L01321208	Left Handle	1	39	L04321002D2	Base Plate Set	1
14	DSCS1903	Stator Set	1	40	T06106402	Spring Pin	1
15	T011425521	Tapping Screw	2	41	T02050109	Screw	1
16	DSCS1904	Switch Set	1	42	T04040903	Spring Washer	2
17	L01321203	Switch Button	1	43	L02321202	Rubber Cover	1
18	DSCS1906	Internal wire set	1	44	L09320904	Spring	1
19	DSCS1904	Rotor Set	1	45	L00320406	Wing Nut	1
20	T011401225	Screw	1	46	T021400651	Screw	1
21	L04320908	Wire Clamp	1	47	L04321901	Angle Indicator	1
22	T011501425	Screw	2	48	L00320404	Wing Nut	1
23	T011503025	Screw	1	49	L06323502A1	Screw	1
24	L06321202	Lock Shaft	1	50	T04060202	Washer	2
25	L01321204	Button	1	51	L01323504A	Handle	1
26	T04091703	"E" Ring	2	52	L06320401A	Screw	1

SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS

CIRCULAR SAW WITH LASER TRAC -- MODEL NUMBER 320.28060

The Model Number will be found on the Nameplate.
Always mention the Model Number when calling about your tool.

No.	Part No.	Description	Quantity
53	L06323501A1	Nut	1
54	L01321209	Right Handle	1
55	T.12.2.22601A	Switch	1
56	L04410201	Cord Clamp	1
57	T011401256	Screw	2
58	L02320403	Cord Sleeve	1
59	L99321201	Wrench	1
60	T146056114	Power Cord	1
61	L01321202	Lining	1
62	L03321903	Moving Guard	1
63	T04421303	Circlip	1
64	L06320301	Inner Flange	1
65	L99321202	Blade	1
66	L06320102	Outer Flange	1
67	L06321201	Flange Bolt	1
68	L03321202	Fixed Guard	1
69	L02320901	Rubber Washer	1
70	L04320901	Washer	1
71	T021350821	Screw	4
72	B4.3219.SE1A	Name Plate	1
73	L01321205	Lens	1
74	L02321201	"O" Ring	1
75	B.4.3212.SE7B	Depth Label	1
76	DSCS1902	Gear Case Set	1
77	L99321004A	Power Cord Clamp	1

SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS

