

## Owner's Manual

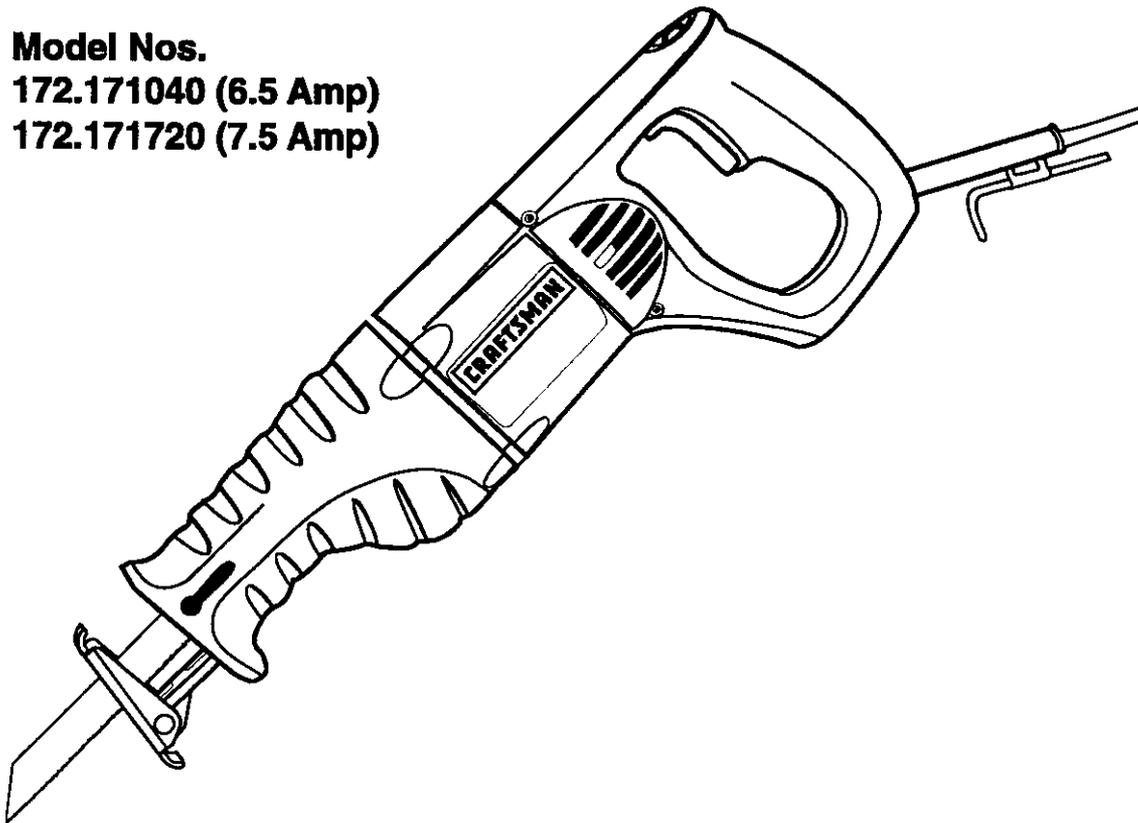
# CRAFTSMAN®

## Reciprocating Saw Variable Speed Double Insulated

Model Nos.

172.171040 (6.5 Amp)

172.171720 (7.5 Amp)



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

- SAFETY
- OPERATION
- MAINTENANCE
- ESPAÑOL

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

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### **FULL ONE YEAR WARRANTY ON CRAFTSMAN RECIPROCATING SAW**

If this CRAFTSMAN Reciprocating Saw fails to give complete satisfaction within one year from the date of purchase, **RETURN IT TO THE NEAREST SEARS STORE IN THE UNITED STATES**, and Sears will replace it, free of charge. If this CRAFTSMAN Reciprocating Saw is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

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.**

### 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.
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.

## SAFETY INSTRUCTIONS cont.

### ELECTRICAL SAFETY cont.

- 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).

Minimum Gauge for Extension Cords (AWG)				
Volts	Total Length of Cord in Feet			
120V	0 - 25 ft.	26 - 50 ft.	51 - 100 ft.	101 - 150 ft.
Ampere Rating	AWG	AWG	AWG	AWG
More than 0 Not more than 6	18	16	16	14
More than 6 Not more than 10	18	16	14	12
More than 10 Not more than 12	16	16	14	12
More than 12 Not more than 16	14	12	Not Recommended	

### PERSONAL SAFETY

- 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.
- 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.
- ALWAYS** avoid accidental starting. **BE SURE** switch is "Off" before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch in the "On" position invites accidents.
- 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.
- 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.
- ALWAYS** use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions

## **SAFETY INSTRUCTIONS cont.**

### **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.

 **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 can become hazardous when used on another tool.

## **SAFETY INSTRUCTIONS cont.**

### **SERVICE SAFETY**

- 1. 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.
- 2. When servicing a 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 electric shock or injury.

### **ADDITIONAL SPECIFIC SAFETY RULES**

- 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.** Following this rule will reduce the risk of electric shock, fire or serious injury.
- 2. 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.
- 3. ALWAYS keep your hands away from cutting area. DO NOT reach under the material being cut because the nearness of the blade to your hand is hidden from your sight.**
- 4. DO NOT use dull or damaged blades.** Bent blades can break easily, or cause kickback.
- 5. ALWAYS wear safety glasses or eye shields when using this saw. ALWAYS wear a dust mask or respirator for applications which generate dust.**
- 6. ALWAYS protect your lungs. Wear a face mask or dust mask if the operation is dusty.** Following this rule will reduce the risk of serious personal injury.
- 7. ALWAYS protect your hearing. Wear hearing protection during extended periods of operation.** Following this rule will reduce the risk of serious personal injury.
- 8. ALWAYS inspect and remove all nails from lumber before sawing.** Following this rule will reduce the risk of serious personal injury.
- 9. 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.**

## SAFETY INSTRUCTIONS cont.

### ADDITIONAL SPECIFIC SAFETY RULES cont.

**⚠ WARNING:** Some dust particles created by power sanding, sawing, grinding, drilling and other construction jobs contain 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.
- 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.



**⚠ WARNING:** The operation of any 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, both available at Sears Retail Stores.

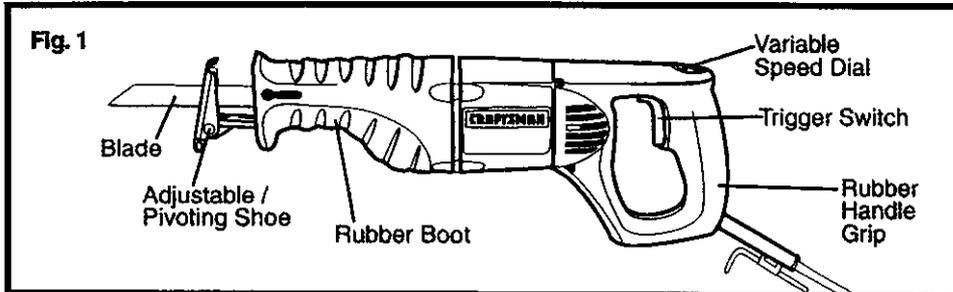
The label on your tool may include the following symbols.

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

**IMPORTANT! READ ALL INSTRUCTIONS**

## DESCRIPTION

Your 6.5 and 7.5-amp reciprocating saws have many built-in convenience features for fast, efficient cutting. These features include a variable speed dial that allows you to change the speeds for cutting a variety of materials. An adjustable/pivoting shoe for maximum control in a variety of cuts and an easy-to-grip rubber boot.



## PRODUCT SPECIFICATIONS

Input	6.5 Amps or 7.5 Amps
Blade Stroke	1 <sup>1</sup> / <sub>8</sub> in.
Blade Type	1/2 in. Universal Shank
Rating	120 volts, 60 Hz AC
No-load Speeds	0 to 2400 SPM

## OPERATION

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

**⚠ 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.

**⚠ 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.

**⚠ CAUTION:** ALWAYS wear eye protection while operating this power tool.

### USING THE VARIABLE SPEED DIAL

Variable speed provides increased cutting versatility.

Simply rotate the dial from the slowest setting (1) to the highest setting (6) depending upon the material being cut.

## OPERATION cont.

### Choosing the Correct Speed

The speed you use will depend on the type of materials that you are cutting:

1. Use high speeds for cutting wood.
2. Medium speed is best for non-ferrous materials.
3. Low speed is recommended for cutting metal.

**NOTE:** Material thickness and blade selection will also affect your speed selection. As a general rule, as the material thickness increases, the speed should be slower.

**⚠ CAUTION:** Use a very slow speed when beginning a cut. Then increase speed once the cut is started. Prolonged use at a very slow speed may damage your saw.

### BLADE INSTALLATION AND REMOVAL

This saw is designed to use all 1/2-in. universal shank blades.

**⚠ WARNING:** To prevent personal injury, **ALWAYS** disconnect the plug from power source **BEFORE** assembling parts, making adjustments or changing blades.

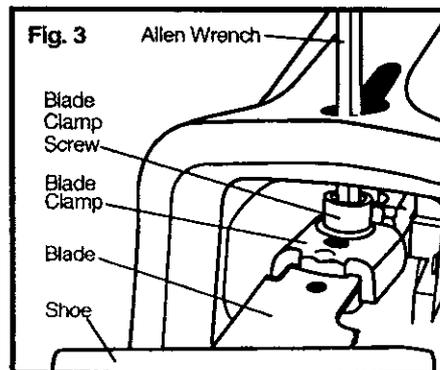
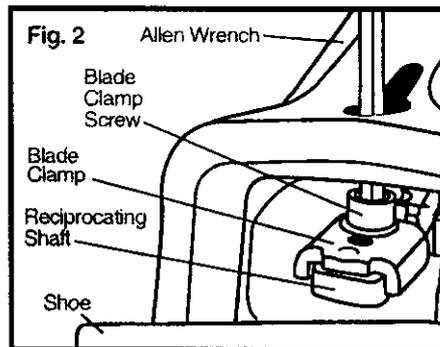
#### Installing the Blade (Figure 2)

1. Unplug the saw.
  2. Loosen blade clamp screw with Allen wrench (included).
- NOTE:** DO NOT completely remove the blade clamp screw. Just loosen it enough to allow the blade to fit between the blade clamp and the reciprocating shaft.
3. Insert blade through the shoe and line it up between the blade clamp and the reciprocating shaft.
  4. Insert the blade far enough in so that the hole in the blade is positioned over the "bump" or "stationary pin". Tighten screw with wrench.

**NOTE:** If the blade should break off and the shank does not come out of the clamp, loosen the screw. Then use a nail or other pointed object to pry the blade shank off of the "bump" or "stationary pin".

#### Removing the Blade (Figure 3)

1. See Steps 1 and 2 in Installing the Blade above.
2. When screw is clear of the blade, pull blade shank out of opening in blade clamp.



## OPERATION cont.

### ADJUSTING THE SLIDING / PIVOTING SHOE (Figure 4)

The shoe slides in or out to adjust the depth of cut to material being cut for maximum control and longer blade life.

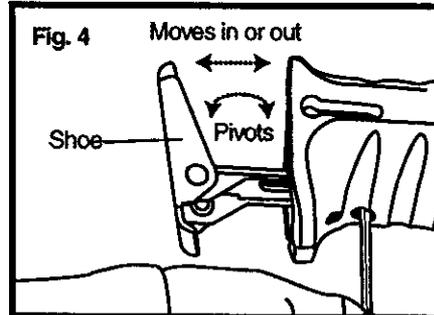
#### To Slide Shoe In or Out: (See Fig. 4)

1. Use the Allen wrench (included) to loosen the 2 screws on bottom of saw housing.
2. Slide shoe in or out to the depth of cut that you desire and retighten both screws.

**NOTE:** The shoe also pivots to provide maximum control against the surface being cut.

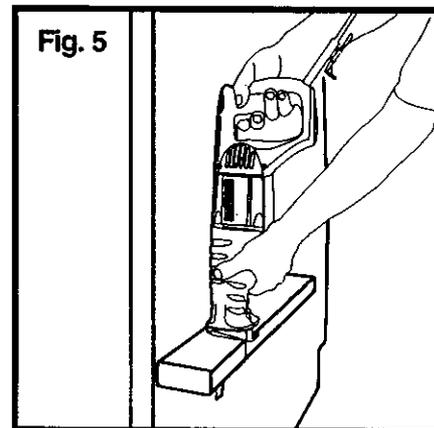
#### To Pivot Shoe: (See Fig. 4)

1. Firmly hold saw and then pivot shoe to desired position.



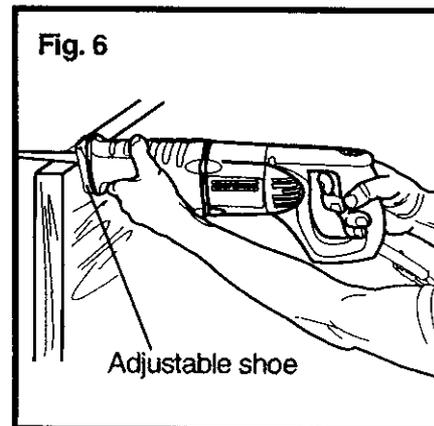
### FLUSH CUTTING (Figure 5)

1. The compact design of the motor housing and the adjustable shoe on this saw allows you to make extremely close cuts in floors, corners and other extremely tight areas.
2. To obtain the maximum flush cutting capability of this saw, make sure that the shoe is in its closest position to the saw housing. And the teeth of the blade are facing as close as possible to the work surface.



### WOOD CUTTING (Figure 6)

1. **ALWAYS** clamp the workpiece down to prevent it from slipping.
2. Place the adjustable shoe and the blade lightly against the surface to be cut.
3. Turn on saw and allow it to come to full speed before applying pressure to the workpiece.
4. **ALWAYS** hold the saw firmly with both hands while cutting. Whenever possible, hold the adjustable shoe firmly against the material to be cut. This will prevent the saw from jumping or vibrating and help minimize blade breakage.



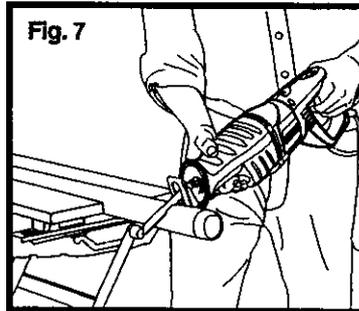
**NOTE:** Wear gloves if cutting for long periods.

## OPERATION cont.

### METAL CUTTING (Figure 7)

This saw has different metal cutting capacities depending upon the type of blade being used and metal being cut.

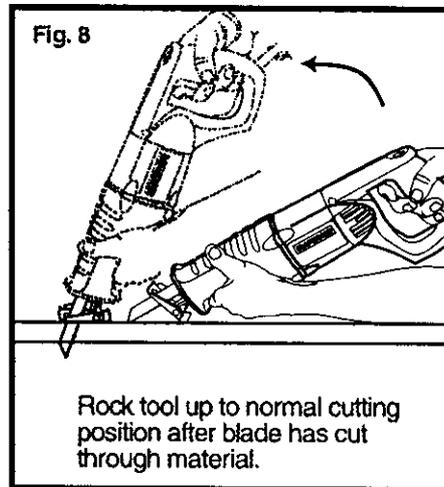
1. **ALWAYS** clamp the work down to prevent it from slipping.
2. Use a finer blade for ferrous metals and a coarse blade for non-ferrous metals.
3. When cutting thin gauge sheet metals, **ALWAYS** clamp wood on both sides of the sheet. This will give you a clean cut without excess vibration or tearing of the metal.
4. **DO NOT** force the cutting blade. Forcing the blade will reduce blade life and cause the blade to break.



**NOTE:** We recommend that you spread a thin film of oil or other coolant along the line of cut ahead of the saw. This will allow easier operation and help extend blade life. When cutting aluminum, use kerosene.

### POCKET CUTTING: Wood Only (Figure 8)

1. Measure the surface area to be cut and mark it clearly using a pen, pencil or chalk.
2. Install a pocket cutting blade into saw.
3. Tip the saw backwards until the back edge of the adjustable shoe is resting on the work surface.
4. To avoid breaking the blade, start the saw and use the slowest speed to begin the cut. Then gradually increase the speed as you start to cut.
5. Hold the saw handle firmly and begin to make a slow, deliberate upward swing with the handle of the saw.
6. The blade will begin to feed into the material.
7. **ALWAYS** be sure that the blade is completely through the material before continuing with the pocket cut.



**NOTE:** In areas where blade visibility is limited, use the edge of the saw guard as a guide.

## MAINTENANCE

### SERVICE

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

1. Tool service **MUST BE** performed only by a Sears Service Center. Service or maintenance performed by unqualified personnel could result in a risk of injury.

**IMPORTANT NOTE:** All service that requires opening the saw should only be performed at a Sears Service Center.

2. When servicing a 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 electric shock or injury.

### TOOL LUBRICATION

Your CRAFTSMAN Reciprocating Saw has been properly lubricated and is ready to use.

1. In two to six months, depending on use, take your tool to the nearest Sears Service Center for a complete cleaning, inspection and lubrication.
2. Tools used constantly on production jobs will need lubrication more often.
3. Tools that haven't been used for long periods of time should be lubricated before you use them.

### WHEN SERVICING, USE ONLY IDENTICAL REPLACEMENT PARTS

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

1. Only the parts shown on pages 14-15 are intended to be repaired or replaced by the customer. All other parts represent an important part of the double insulation system and should only be serviced at a Sears Service Center.

## **MAINTENANCE cont.**

### **CLEANING**

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

**⚠ CAUTION:** Certain cleaning agents and solvents cause damage to the plastic parts. These include gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

1. Use a clean cloth to remove dirt, carbon dust, etc.
2. Electric tools are subject to accelerated wear and possible premature failure when they are used to work on fiber glass boats, sports cars, etc. The fiber glass chips and grindings 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 fiber glass. During any use on fiber glass, it is extremely important that the tool is cleaned frequently with compressed air.

**⚠ WARNING:** **ALWAYS** wear safety goggles when cleaning tools with compressed air.

### **IMPORTANT:**

To assure product **SAFETY** and **RELIABILITY**, repairs, maintenance and adjustment **MUST** be performed by a Sears Service Center.

## **ACCESSORIES**

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

### **BLADES**

Sears has a large selection of reciprocating saw blades in a variety of lengths and teeth per inch that are ideal for a wide variety of cutting needs. Choose blades for cutting wood only, blades for metal cutting only and general-purpose blades that cut wood or metal.

### **EXTENSION CORDS**

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

**⚠ WARNING:** The use of attachments or accessories that are not recommended might be dangerous.

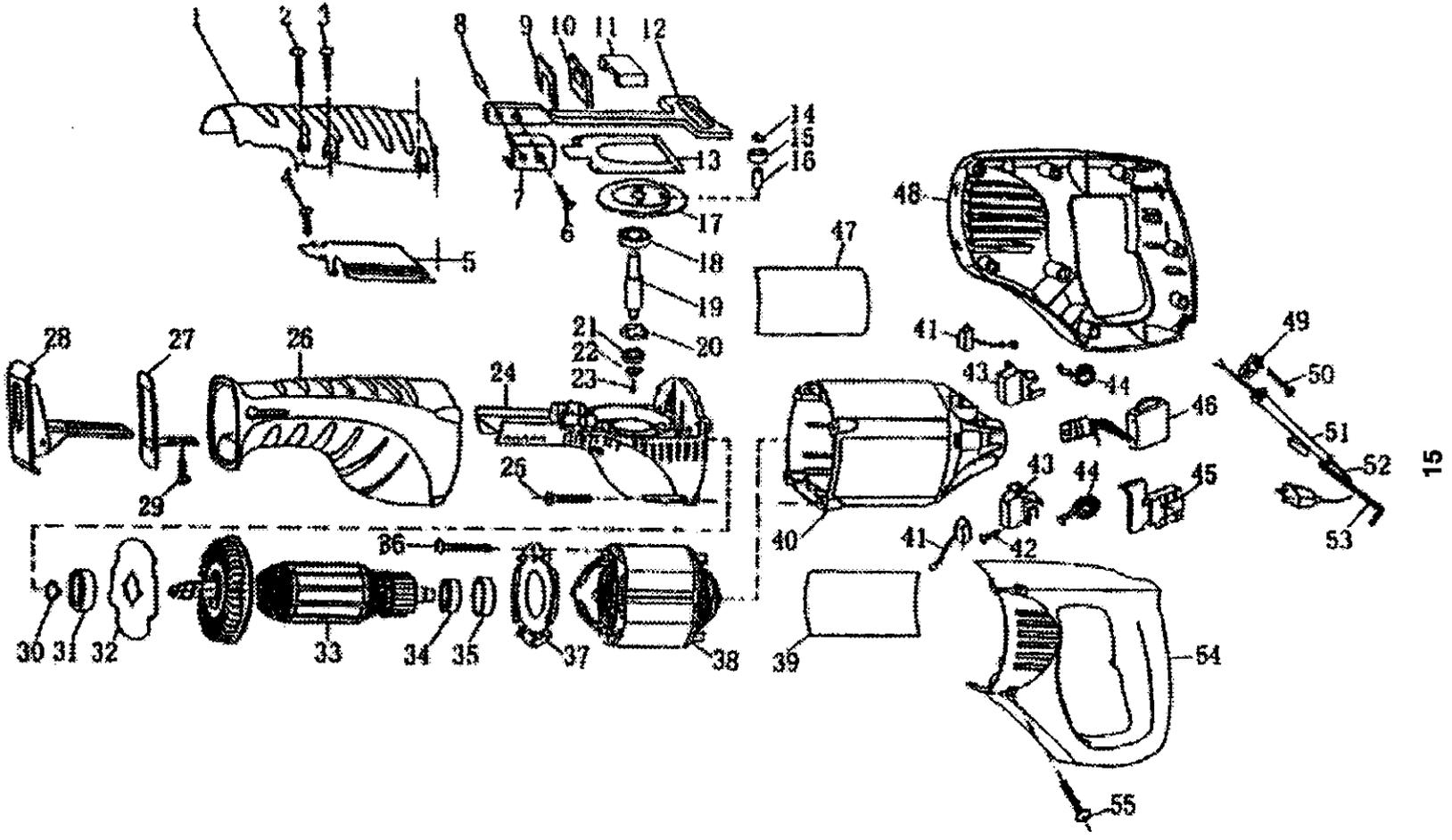
## Reciprocating Saw-Model No. 172.171040 (6.5 Amp), 172.171720 (7.5 Amp)

The Model Number will be found on the Nameplate. Always mention the Model No. in all correspondence regarding your tool

No.	Part No.	Description	Quantity
1	B09.0.05.1	Cover	1
2	W57.56.0	Screw Set	2
3	W57.36.0	Screw Set	4
4	W57.57.0	Screw Set	2
5	B09.0.09	Bracket	1
6	W57.02.0	Screw	1
7	B08.3.53	Blade Clamp	1
8	W51.52.0	Roller Pin	1
9	B09.0.12	Gasket	1
10	T15.02.00	Seal	1
11	W07.02	Sliding Bearing	1
12	B09.2.01	Reciprocating Shaft	1
13	B09.0.11	Yoke Plate	1
14	T14.03.01	Washer	1
15	B09.1.01	Roller Bearing	1
16	B09.1.02	Small Shaft	1
17	TB01.01	Gear	1
18	W50.03.0	Ball Bearing	1
19	TB02.01	Spindle	1
20	TA05.04	Loop	1
21	W50.12.0	Ball Bearing	1
22	T14.01.03	Press Plate	1
23	W57.36.0	Screw Set	1
24	B09.0.06	Gear Case	1
25	W55.76.0	Screw	4
26	B09.0.04.1	Rubber Sleeve	1
27	B09.0.13	Framework	1
28	B09.3.00	Baffle Plate	1

No.	Part No.	Description	Quantity
29	W57.04.0	Screw	2
30	W61.52.0	Loop	1
31	W50.03.3	Ball Bearing	1
32	B09.0.08	Bearing Press Plate	1
33	TB51.03.01	Rotor	1
34	W50.11.3	Ball Bearing	1
35	T05.02.05	Bearing Sleeve	1
36	W55.70.0	Screw	2
37	B09.0.07.1	Fan Baffle	1
38	TB50.03.01	Stator	1
39	B09.0.15.1	Identification Label	1
40	B09.0.01.1	Shell	1
41	T02.11.00	Brush	2
42	W55.06.0	Screw	4
43	T03.09.00	Brush Holder	2
44	T04.01.01	Brush Spring	2
45	W02.23	Switch	1
46	W02.24	Speed Adjuster	1
47	B09.0.14.1	Nameplate	1
48	B09.0.03.1	Right Handle	1
49	T08.01.07	Cord Clamp	1
50	W55.58.0	Screw	2
51	T05.01.06	Cord Protector	1
52	W01.32.21	Cord and Plug	1
53	W05.09	Wrench	1
54	B09.0.02.1	Left Handle	1
55	W55.75.1	Screw	8

**SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS**



Reciprocating Saw-Model Nos. 172.171040 (6.5 Amp), 172.171720 (7.5 Amp)

## Get it fixed, at your home or ours!

### Your Home

For repair **in your home** of all major brand appliances, lawn and garden equipment, or heating and cooling systems, **no matter who made it, no matter who sold it!**

For the replacement parts, accessories and owner's manuals that you need to do-it-yourself.

For Sears professional installation of home appliances and items like garage door openers and water heaters.

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(1-800-469-4663) (U.S.A. and Canada)  
[www.sears.com](http://www.sears.com) [www.sears.ca](http://www.sears.ca)

### Our Home

For repair of carry-in products like vacuums, lawn equipment, and electronics, call or go on-line for the nearest **Sears Parts and Repair Center.**

**1-800-488-1222** Anytime, day or night (U.S.A. only)  
[www.sears.com](http://www.sears.com)

To purchase a protection agreement (U.S.A.) or maintenance agreement (Canada) on a product serviced by Sears:

**1-800-827-6655** (U.S.A.) **1-800-361-6665** (Canada)

Para pedir servicio de reparación a domicilio, y para ordenar piezas:

**1-888-SU-HOGAR<sup>SM</sup>**  
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(1-800-533-6937)  
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