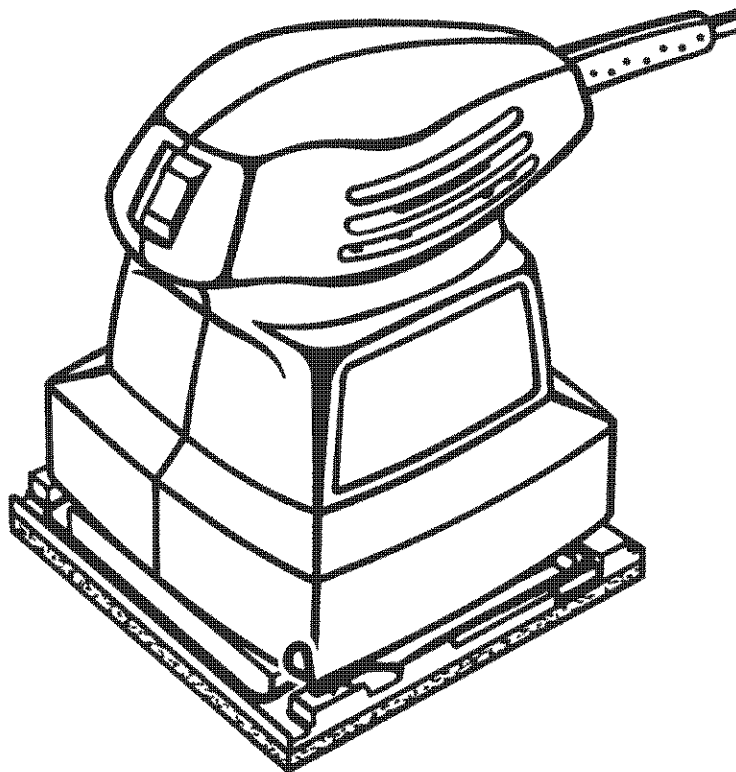


# Operator's Manual

**CRAFTSMAN®**

## Palm Grip Finishing Sander Double Insulated

Model No.  
315.116272



Save this manual for future reference

**⚠ CAUTION:** Read and follow all safety rules and operating instructions before first use of this product.

Customer Help Line: 1-800-932-3188

Sears, Roebuck and Co., 3333 Beverly Rd., Hoffman Estates, IL 60179 USA  
Visit the Craftsman Web page: [www.sears.com/craftsman](http://www.sears.com/craftsman)



# TABLE OF CONTENTS

■ Warranty .....	2
■ Introduction .....	2
■ General Safety Rules .....	3-4
■ Specific Safety Rules .....	4
■ Symbols .....	5
■ Specifications .....	6
■ Unpacking .....	6
■ Operation .....	7-10
■ Maintenance .....	11
■ Accessories .....	12
■ Exploded View and Parts List .....	13
■ Parts, Ordering, and Service .....	14

## WARRANTY

### FULL ONE YEAR WARRANTY ON CRAFTSMAN SANDER

If this **CRAFTSMAN** tool 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** tool 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**

## INTRODUCTION

Your sander has many features for making the use of this tool more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this tool making it easy to maintain and operate.


 **WARNING:** Do not attempt to use this tool until you thoroughly read and completely understand the operator's manual. Pay close attention to the safety rules, including Dangers, Warnings, and Cautions. If you use your tool properly and only as intended, you will enjoy years of safe, reliable service.

 Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.



**WARNING:** The operation of any router can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection which is marked to comply with ANSI Z87.1.

# GENERAL SAFETY RULES


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

## SAVE THESE INSTRUCTIONS

### Work Area

- **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools may create sparks which may ignite the dust or fumes.
- **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

### Electrical Safety

- **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation  eliminates the need for the three-wire grounded power cord and grounded power supply system.
- **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.
- **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
- **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These cords are rated for outdoor use and reduce the risk of electric shock.

### Personal Safety

- **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.

- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on, invites accidents.
- **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. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- **Use safety equipment. Always wear eye protection.** Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

### Tool Use and Care

- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- **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.
- **Disconnect the plug from power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of the reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **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.
- **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.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become hazardous when used on another tool.

## GENERAL SAFETY RULES

### Service

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

## SPECIFIC SAFETY RULES

- **Hold tool by insulated gripping surfaces when performing an operation where the tool may contact hidden wiring or its cord.** Contact with a “live” wire will make exposed metal parts of the tool “live” and shock the operator.

### Additional Rules For Safe Operation

- **Know your power tool. Read operator’s manual carefully. Learn its 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.
- **Always wear safety glasses. Everyday eye-glasses have only impact-resistant lenses; they are NOT safety glasses.** Following this rule will reduce the risk of serious personal injury.
- **Protect your lungs. Wear a face or dust mask if the operation is dusty.** Following this rule will reduce the risk of serious personal injury.
- **Protect your hearing. Wear hearing protection during extended periods of operation.** Following this rule will reduce the risk of serious personal injury.
- **Inspect tool cords periodically and, if damaged, have repaired at your nearest authorized service center. Constantly stay aware of cord location.** Following this rule will reduce the risk of electric shock or fire.
- **Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center.** Following this rule will reduce the risk of shock, fire, or serious injury.
- **Do not abuse cord. Never carry the tool by the cord or yank it to disconnect it from the receptacle. Keep cord away from heat, oil, and sharp edges.** Following this rule will reduce the risk of electric shock or fire.
- **Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. A wire gage size (A.W.G.) of at least 16 is recommended for an extension cord 100 feet or less in length. A cord exceeding 100 feet is not recommended. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.** An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.
- **Inspect for and remove all nails from lumber before sanding.** Following this rule will reduce the risk of serious personal injury.
- **Drugs, alcohol, medication. Do not operate tool while under the influence of drugs, alcohol, or any medication.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.**






**WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

# SYMBOLS

**Important:** Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type or a characteristic of current
$n_0$	No Load Speed	Rotational speed, at no load
	Class II Construction	Designates double-insulated construction tools
.../min	Revolutions or Reciprocation Per Minute	Revolutions, strokes, surface speed, orbits etc. per minute
	Safety Alert	Indicates danger, warning or caution. It means attention!!! Your safety is involved.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

## SYMBOL MEANING



**DANGER:** Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



**WARNING:** Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



**CAUTION:** Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

**NOTE:** Advises you of information or instructions vital to the operation or maintenance of the equipment.

**SAVE THESE INSTRUCTIONS**

## SPECIFICATIONS

Size of Paper .....	1/4 Sheet
Orbital Motion .....	
Amperes .....	1.8
Input .....	120 Volts, 60 Hz, AC only
No Load Speed .....	14,000/min
Orbital Diameter .....	1/16 Inch

## UNPACKING

Your sander has been shipped completely assembled and ready for use. After removing it from the box, inspect it carefully to make sure no breakage or damage has occurred during shipping and that no parts are missing. If any parts are damaged or missing, please call 1-800-932-3188 for assistance.



**WARNING:** If any parts are missing, do not operate your sander until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

## OPERATION

**WARNING:** Always wear safety goggles or safety glasses with side shields when operating your sander. Failure to do so could result in dust, shavings, loose particles or foreign objects being thrown into your eyes, causing possible serious injury.

### KNOW YOUR SANDER

Before attempting to use your sander, familiarize yourself with all operating features and safety requirements. See Figure 1.

**WARNING:** Do not allow familiarity with your sander to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

### SWITCH

See Figure 1.

Your sander is equipped with a simple switch control located on the front of your sander. To turn your sander **ON**, depress the switch button to the **ON** position as shown in figure 1. To turn your sander **OFF**, depress the switch button in the opposite direction to the **OFF** position.

**Be sure your sander is not ON before connecting to power supply source.**

### ELECTRICAL CONNECTION

Your sander has a precision built electric motor. It should be connected to a **power supply that is 120 volts, 60Hz, AC only (normal household current)**. Do not operate this tool on direct current (DC). A voltage drop of more than 10 percent will cause a loss of power and the motor will overheat. If your tool does not operate when plugged into an outlet, double-check the power supply.

### DOUBLE INSULATION

Double insulation is a concept in safety in electric power tools, which eliminates the need for the usual three-wire grounded power cord. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. Double insulated tools do not need to be grounded.

**Important:** Servicing of a tool with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service, we suggest you return the tool to your nearest authorized service center for repair. Always use original factory replacement parts when servicing.

**WARNING:** The double insulated system is intended to protect the user from shock resulting from a break in the tool's internal wiring. Observe all normal safety precautions to avoid electrical shock.

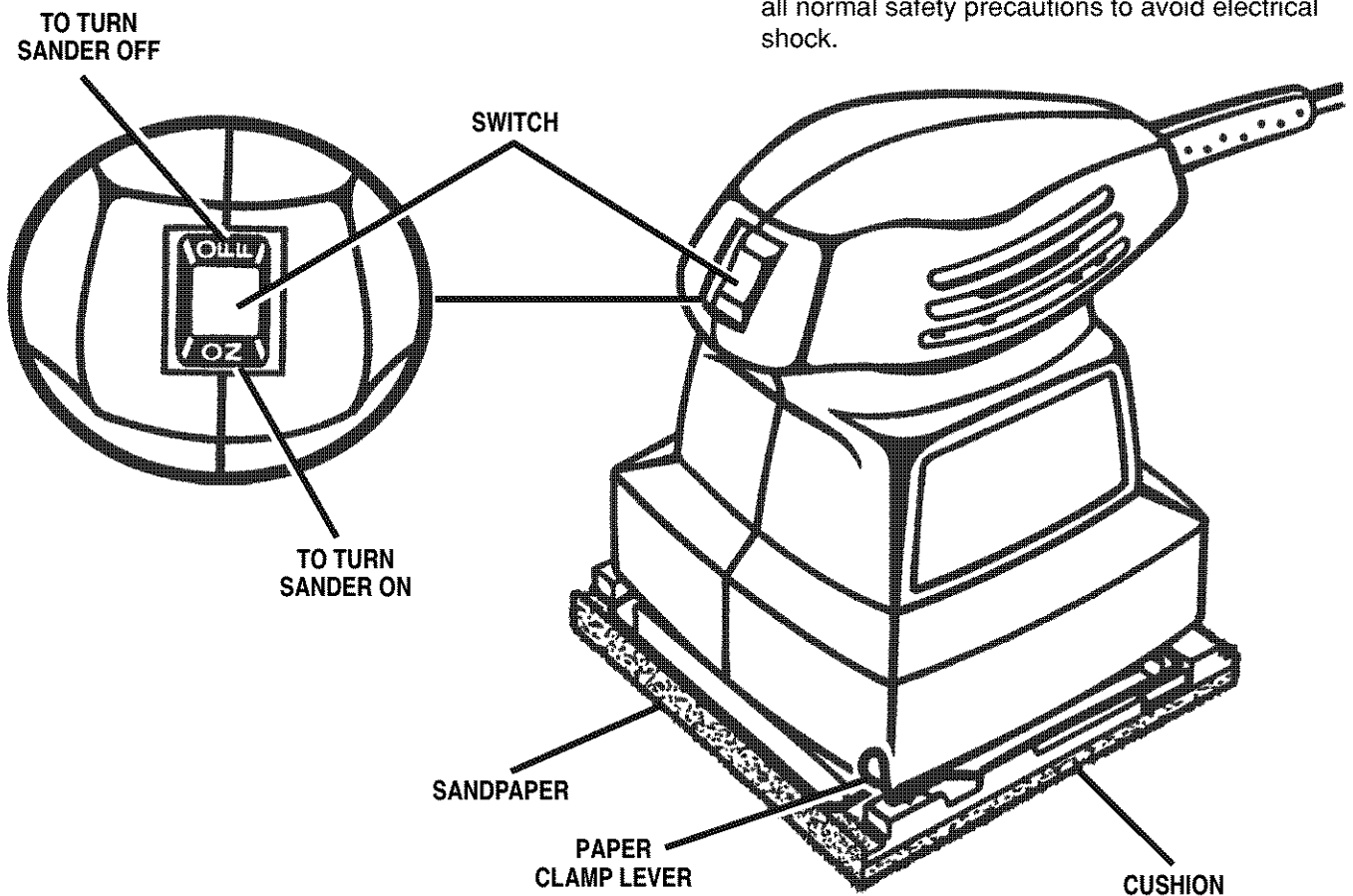


Fig. 1

## OPERATION

### SELECTING SANDPAPER

Selecting the correct size grit and type sandpaper is an extremely important step in achieving a high quality sanded finish. Aluminum oxide, silicon carbide, and other synthetic abrasives are best for power sanding. Natural abrasives, such as flint and garnet are too soft for economical use in power sanding.

In general, coarse grit will remove the most material and finer grit will produce the best finish in all sanding operations. The condition of the surface to be sanded will determine which grit will do the job. If the surface is rough, start with a coarse grit and sand until the surface is uniform. Medium grit may then be used to remove scratches left by the coarser grit and finer grit used for finishing of the surface. Always continue sanding with each grit until surface is uniform.

**Note:** To prevent damaging the cushion, DO NOT use sander without sandpaper installed.

**WARNING:** Your sander should never be connected to power supply when you are installing or replacing sandpaper, assembling parts, making adjustments, when cleaning, or when not in use. Disconnecting your sander will prevent accidental starting that could cause serious injury.

### INSTALLING NON-ADHESIVE SANDPAPER

See Figure 2.

Inspect sandpaper before installing. **Do not use if broken or defective.**

#### ■ UNPLUG YOUR SANDER.

**WARNING:** Failure to unplug your sander could result in accidental starting causing serious injury.

- If replacing sandpaper, remove old sandpaper. To remove old sandpaper, release paper clamp by lifting up on paper clamp lever and disengaging it from the tab on the platen.
- Insert end of new sandpaper under the paper clamp.
- Lift up on paper clamp lever and lock into place. Apply downward pressure to conform sandpaper to platen.
- Wrap sandpaper around cushion. Lift paper clamp lever on opposite end of sander and insert loose end of sandpaper under the paper clamp. Fit sandpaper against cushion as tight as possible.
- Lift up on paper clamp lever and lock into place.

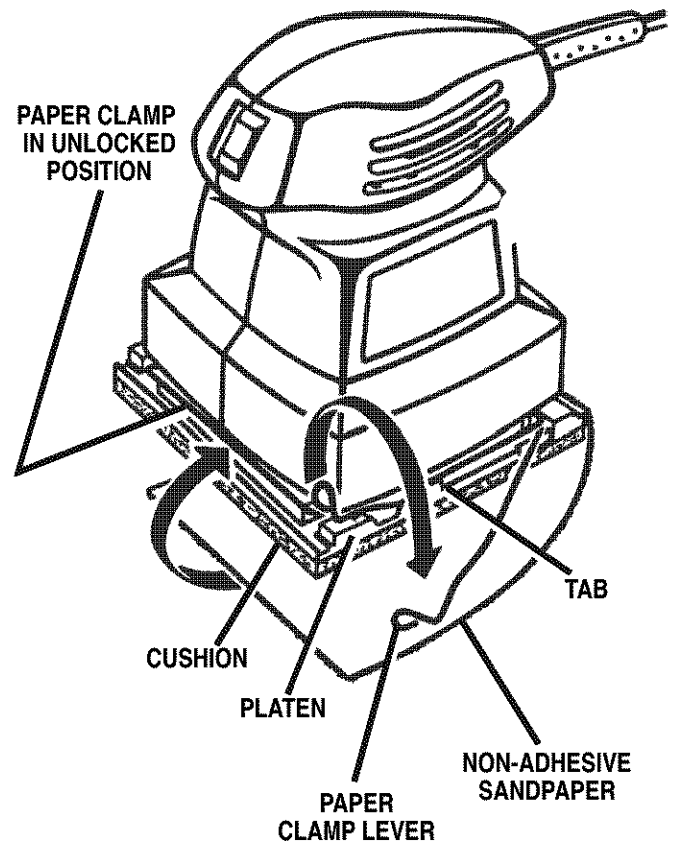


Fig. 2



## OPERATION

### INSTALLING ADHESIVE SANDPAPER

See Figure 3.

Inspect sandpaper before installing. **Do not use if broken or defective.**

#### ■ UNPLUG YOUR SANDER.

**⚠ WARNING:** Failure to unplug your sander could result in accidental starting causing serious injury.

- If replacing sandpaper, remove old sandpaper by peeling it off cushion. If removing non-adhesive sandpaper, release paper clamp by lifting up on paper clamp lever and disengaging it from the tab on the platen. Then remove non-adhesive sandpaper, lift paper clamp lever, and return it to its proper place over tab on platen.
- Carefully peel adhesive backing from new 1/4 sheet sandpaper.
- Position sandpaper into place, then carefully press sticky side of sandpaper on cushion.

### REMOVING SANDPAPER BEFORE STORAGE

Do not store your sander with sandpaper installed. Heat generated from sanding causes the pressure sensitive adhesive to flow and form a tight bond between the cushion and sandpaper.

Removing the sandpaper soon after you have finished a sanding operation avoids letting the adhesive set up. If the sandpaper is left on the cushion for an extended period of time after use, the adhesive will set up and cause the sandpaper to become difficult to remove. It may also tear when removing. When this situation occurs, it becomes difficult to clean the cushion for the next sandpaper.

**Note:** If you forget to remove the sandpaper after a sanding operation, sand for a few minutes to soften the adhesive backing before attempting to remove sandpaper.

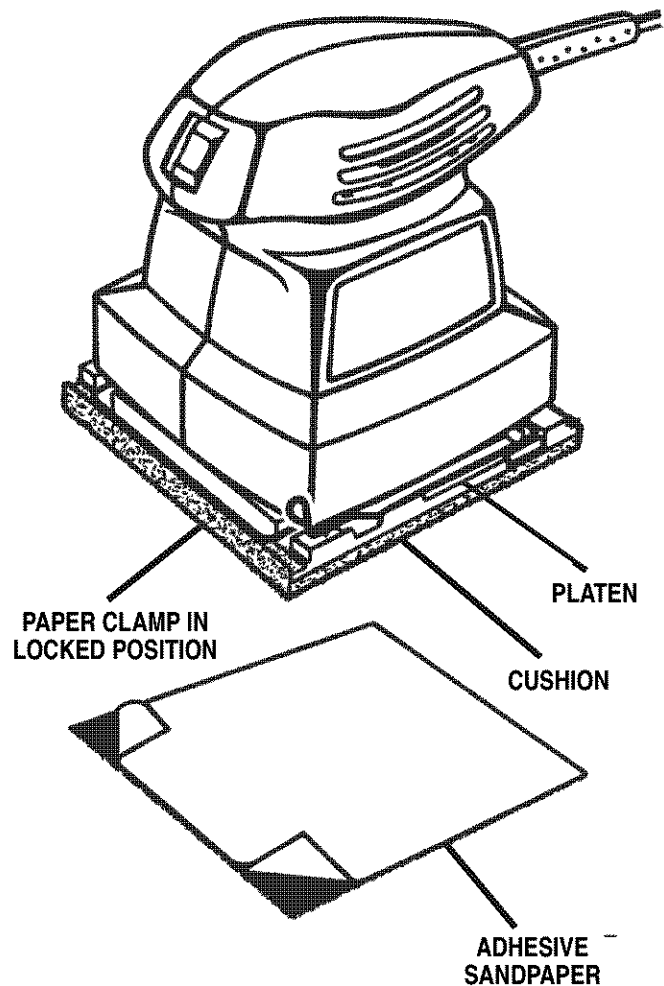


Fig. 3

# OPERATION

## APPLICATIONS

(Use only for the purposes listed below)

- Sanding on wood surfaces.
- Removing rust from and sanding steel surfaces.

**⚠ WARNING:** Do not wear loose clothing or jewelry when operating sander. They could get caught in moving parts causing serious injury. Keep head away from sander and sanding area. Hair could be drawn into sander causing serious injury.

## OPERATING THE SANDER

Clamp or otherwise secure the work to prevent it from moving under your sander.

**⚠ WARNING:** Unsecured work could be thrown towards the operator causing injury.

Hold your sander in front and away from you, keeping it clear of the workpiece. Start your sander by pressing the switch to **ON** position and letting the motor build to its maximum speed. Gradually lower your sander on the work with a slight forward movement. *See Figure 4.* Move it slowly using forward and backward strokes.

**DO NOT FORCE.** The weight of the unit supplies adequate pressure, so let the sanding sheet and sander do the work. Applying additional pressure only slows the motor, rapidly wears sandpaper and greatly reduces sander speed. Excessive pressure will overload the motor causing possible damage from motor overheating and can result in inferior work. Any finish on resin or wood may soften from the frictional heat. Do not allow sanding on one spot too long as the sander's rapid action may remove too much material, making the surface uneven. Always lift your sander from workpiece before turning off.

Flush sanding can be performed with your sander. As shown in figure 5, the front edge of your sander allows flush sanding in corners. The two side edges can also be used when sanding in corners. Always remove sander from workpiece before turning your sander off.

## ORBITAL MOTION

Orbital motion is ideal for fast cutting action when removing old finishes, smoothing rough wood, cutting stock down to required dimensions or for finishing surfaces to be painted. As shown in Figure 6, the sandpaper moves in tiny circles at a very high speed, allowing the sander to move easily.

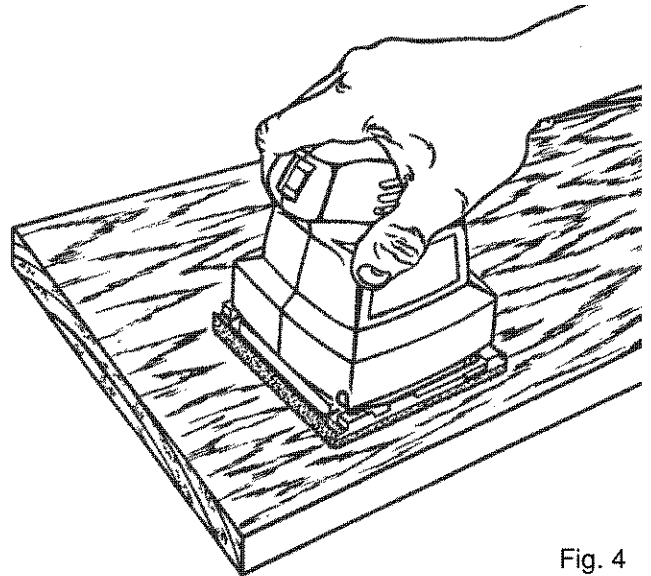


Fig. 4

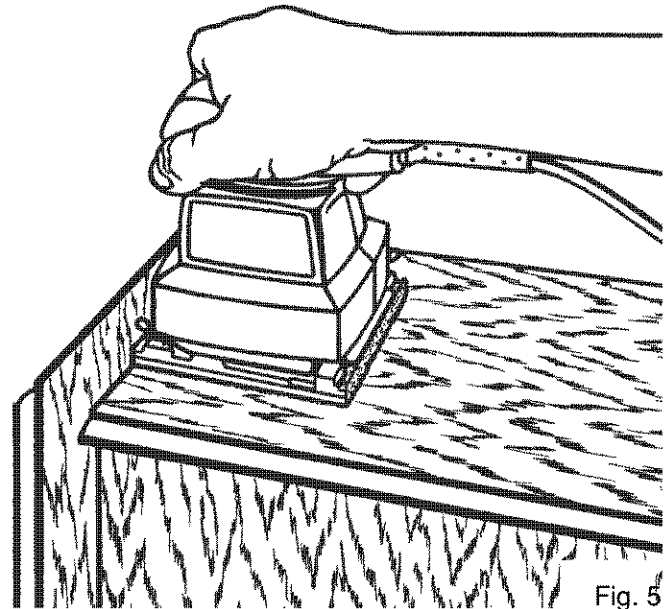
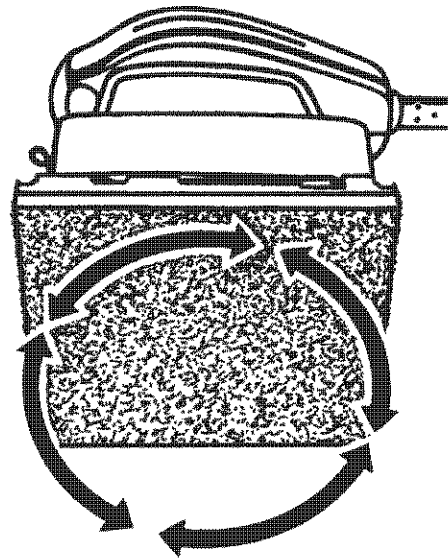



Fig. 5



ORBITAL MOTION

Fig. 6


## MAINTENANCE

 **WARNING:** When servicing use only identical Craftsman replacement parts. Use of any other parts may create a hazard or cause product damage.


### GENERAL

Only the parts shown on parts list, are intended to be repaired or replaced by the customer. All other parts represent an important part of the double insulation system and should be serviced only by a qualified Sears service technician.

Avoid using 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.

 **WARNING:** Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. They contain chemicals that can damage, weaken, or destroy plastic.

It has been found that electric tools are subject to accelerated wear and possible premature failure when they are used on fiberglass boats, sports cars, wallboard, spackling compounds, or plaster. The chips and grindings from these materials are highly abrasive to electric tool parts such as bearings, brushes, commutators, etc. Consequently, it is not recommended that this tool be used for extended work on any fiberglass material, wallboard, spackling compounds, or plaster. During any use on these materials, it is extremely important that the tool is cleaned frequently by blowing with an air jet.

 **WARNING:** Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.


### LUBRICATION


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

### EXTENSION CORDS

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

A wire gage size (A.W.G.) of at least **16** is recommended for an extension cord 100 feet or less in length. When working outdoors, 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 sanding area and position the cord so that it will not get caught on lumber, tools, etc. during sanding operation.

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

## ACCESSORIES

THE FOLLOWING RECOMMENDED ACCESSORIES ARE CURRENTLY AVAILABLE AT SEARS RETAIL STORES.

### ALUMINUM OXIDE SHEETS WITH PAPER BACKING (1/4 SHEET)

X-Fine  
Fine  
Medium  
Coarse

### PRESSURE SENSITIVE ADHESIVE, PAPER BACKED SHEETS (1/4 SHEET)

X-Fine  
Fine  
Medium  
Coarse

THE FOLLOWING STANDARD 4-1/2 IN. X 11 IN. SANDING SHEETS CAN BE CUT TO FIT YOUR SANDER.

### NON-LOADING ALUMINUM OXIDE SANDING SHEETS

X-Fine  
Fine  
Medium  
Coarse

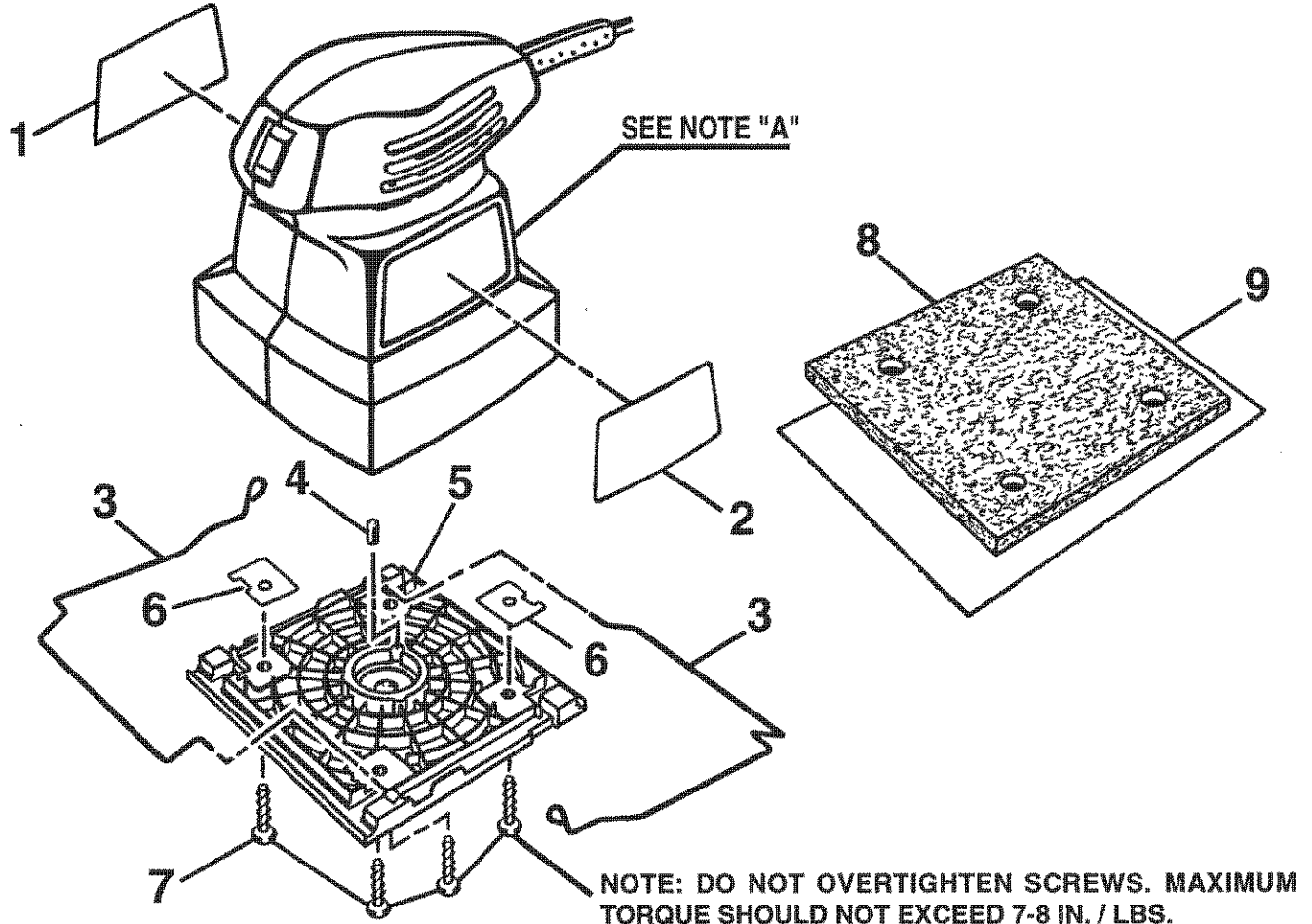


**WARNING:** The use of attachments or accessories not listed above might be hazardous.

# CRAFTSMAN PALM GRIP FINISHING SANDER – MODEL NO. 315.116272

The model number will be found on a plate attached to the motor housing. Always mention the model number in all correspondence regarding your **SANDER** or when ordering repair parts.

SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS



## PARTS LIST

Key No.	Part Number	Description	Qty.
1	983421-001	Data Plate .....	1
2	980438-001	Logo Plate .....	1
3	973776-002	Paper Clamp .....	2
4	623019-004	Rubber Plug .....	1
5	973764-000	Platen (Includes Key Nos. 4 and 8) .....	1
6	974485-001	Paper Clamp Retainer .....	2
7	617966-030	* Screw (#8-10 x 5/8 in. Pan Hd.) .....	4
8	973775-002	Cushion .....	1
9	***	Sandpaper .....	1
	983000-043	Operator's Manual	

**NOTE "A":** The assembly shown represents an important part of the double insulated system. To avoid the possibility of alteration or damage to the system, service should be performed by your nearest Sears Repair Center. Contact your nearest Sears Retail Store.

\* Standard Hardware Item — May Be Purchased Locally

\*\*\* Complete Assortment Available At Your Nearest Sears Retail Store

# 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.

**1-800-4-MY-HOME<sup>®</sup>** (1-800-469-4663)

Call anytime, day or night (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 items like vacuums, lawn equipment, and electronics, call or go on-line for the location of your nearest **Sears Parts & Repair Center.**

**1-800-488-1222**

Call 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>**

(1-888-784-6427)

Au Canada pour service en français:

**1-800-LE-FOYER<sup>MC</sup>**

(1-800-533-6937)

[www.sears.ca](http://www.sears.ca)

# SEARS