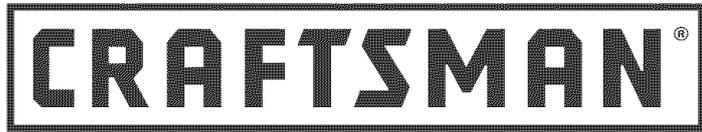
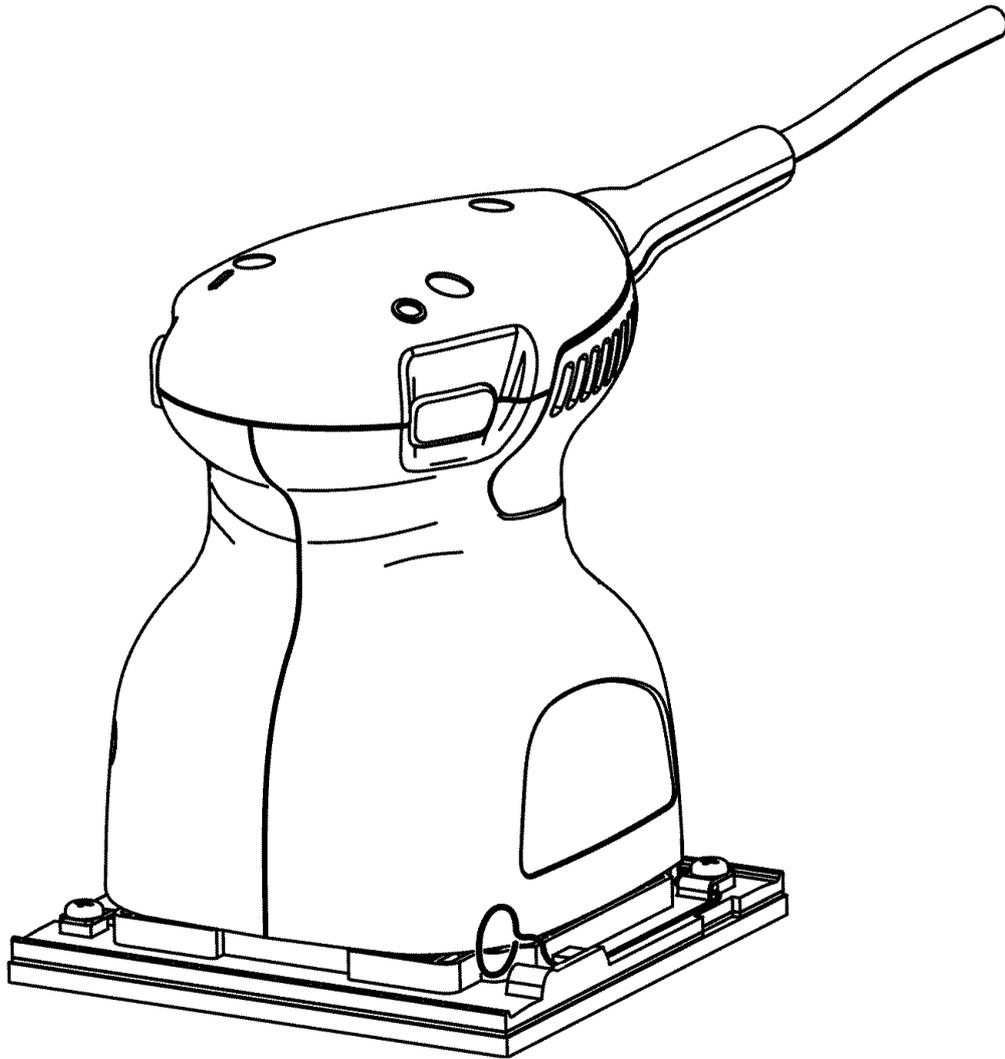


# OPERATOR'S MANUAL



## PALM GRIP FINISHING SANDER DOUBLE INSULATED

Model No.  
315.116900



**⚠ WARNING:** To reduce the risk of injury,  
the user must read and understand the  
operator's manual before using 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)

983000-438  
6-04

**Save this manual for future reference**



# TABLE OF CONTENTS

■ Warranty .....	2
■ Introduction .....	2
■ General Safety Rules .....	3-4
■ Specific Safety Rules.....	4
■ Symbols.....	5-6
■ Electrical.....	7
■ Features.....	8
■ Assembly .....	9
■ Operation.....	9-11
■ Maintenance .....	12
■ Accessories .....	12
■ Exploded View and Parts List.....	13-14
■ Parts Ordering/Service .....	Back Page

## WARRANTY

### ONE YEAR FULL WARRANTY ON CRAFTSMAN TOOL

If this Craftsman tool fails to give complete satisfaction within one year from 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

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

# 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 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.
- **Do not wear loose clothing or jewelry. Contain long hair.** Loose clothes, jewelry, or long hair can be drawn into air vents.
- **Do not use on a ladder or unstable support.** Stable footing on a solid surface enables better control of the tool in unexpected situations.

### 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.
- **Keep the tool and its handle dry, clean and free from oil and grease.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any strong solvents to clean your tool. Following this rule will reduce the risk of loss of control and deterioration of the enclosure plastic.

## GENERAL SAFETY RULES

### SERVICE

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel may 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 shock or injury.

## SPECIFIC SAFETY RULES

- **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 exposed metal parts of the cutting tool “live” and shock the operator.
- **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 eyeglasses 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.
- **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 gauge 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 gauge. The smaller the gauge 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 using this tool.** Following this rule will reduce the risk of 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.

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 **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

Some of the following symbols may be used on this 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 of current
—	Direct Current	Type or a characteristic of current
$n_0$	No Load Speed	Rotational speed, at no load
	Class II Construction	Double-insulated construction
.../min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Read The Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
	Safety Alert	Precautions that involve your safety.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.

# SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	<b>DANGER:</b>	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	<b>WARNING:</b>	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	<b>CAUTION:</b>	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	<b>CAUTION:</b>	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

## SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

 **WARNING:** To avoid serious personal injury, do not attempt to use this product until you read thoroughly and understand completely the operator's manual. Save this operator's manual and review frequently for continuing safe operation and instructing others who may use this product.

## WARNING:



The operation of any power tool 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 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 use eye protection which is marked to comply with ANSI Z87.1.

## SAVE THESE INSTRUCTIONS

# ELECTRICAL

## 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.

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

**NOTE:** 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.

## ELECTRICAL CONNECTION

This tool has a precision-built electric motor. It should be connected to a **power supply that is 120 volts, 60 Hz, AC only (normal household current)**. Do not operate this tool on direct current (DC). A substantial voltage drop 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.

## EXTENSION CORDS

When using a power tool at a considerable distance from a power source, be sure to use an extension cord that has the capacity to handle the current the tool will draw. An undersized cord will cause a drop in line voltage, resulting in overheating and loss of power. Use the chart to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used.

When working outdoors with a tool, use an extension cord that is designed for outside use. This type of cord is designated with "WA" on the cord's jacket.

Before using any extension cord, inspect it for loose or exposed wires and cut or worn insulation.

\*\*Ampere rating (on tool faceplate)

Cord Length	Wire Size (A.W.G.)					
	0-2.0	2.1-3.4	3.5-5.0	5.1-7.0	7.1-12.0	12.1-16.0
25'	16	16	16	16	14	14
50'	16	16	16	14	14	12
100'	16	16	14	12	10	—

\*\*Used on 12 gauge - 20 amp circuit

**NOTE:** AWG = American Wire Gauge

 **WARNING:** Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with a power tool. Failure to do so can result in serious personal injury.

 **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.

# FEATURES

## PRODUCT SPECIFICATIONS

Size of Paper .....	1/4 Sheet	No Load Speed .....	14,000/min.
Motion .....	Orbital	Input .....	120 V, 60 Hz, AC only, 2 Amps
Orbital Diameter .....	1/16 in.	Net Weight.....	3 lbs.

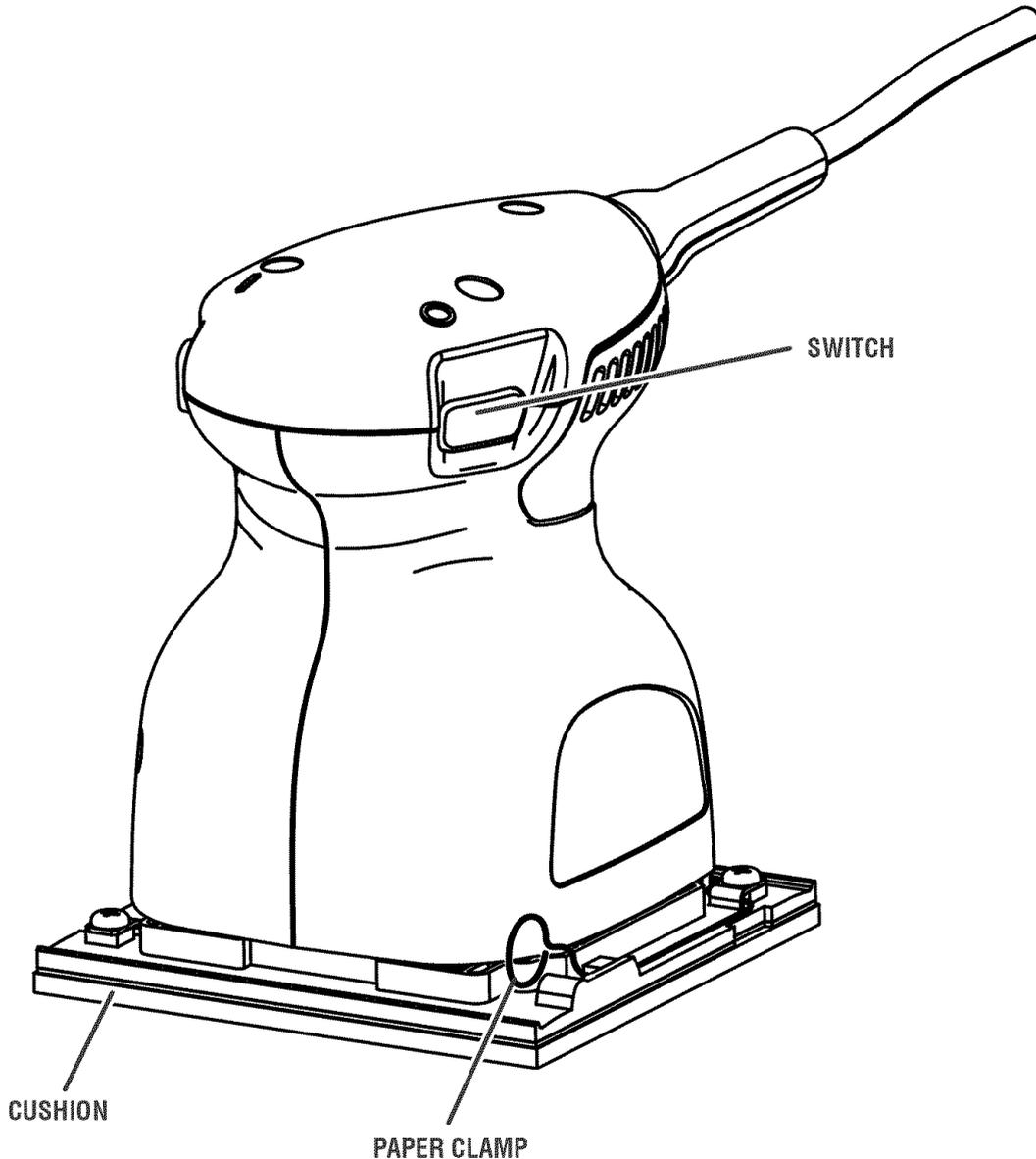


Fig. 1

## KNOW YOUR FINISHING SANDER

See Figure 1.

Before attempting to use this product, familiarize yourself with all operating features and safety rules.

The sander is suitable for sanding with coarse, medium, and fine grit sandpaper. It will produce a fine, scratch-free finish when used to sand with the grain on wood surfaces. It has also been designed so that sanding flush to corners is possible.

## SWITCH

The sander has a conveniently located sealed slide switch to keep out dust for longer life.

## PAPER CLAMP

The sander has two paper clamps designed to secure standard sandpaper to the cushion.

## CUSHION

The cushion of the sander accepts both standard and pressure sensitive adhesive sandpaper.

# ASSEMBLY

## UNPACKING

This product has been shipped completely assembled.

- Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- If any parts are damaged or missing, please call 1-800-932-3188 for assistance.

## PACKING LIST

Sander  
Sanding Sheets (5)  
Operator's Manual

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

 **WARNING:** Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

 **WARNING:** Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious injury.

# OPERATION

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

 **WARNING:** Always wear safety goggles or safety glasses with side shields when operating power tools. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

## APPLICATIONS

You may use this tool for the purposes listed below:

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

## 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.

# OPERATION

## INSTALLING NON-ADHESIVE SANDPAPER

See Figure 2.

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

- Unplug the sander.
- 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 side 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.

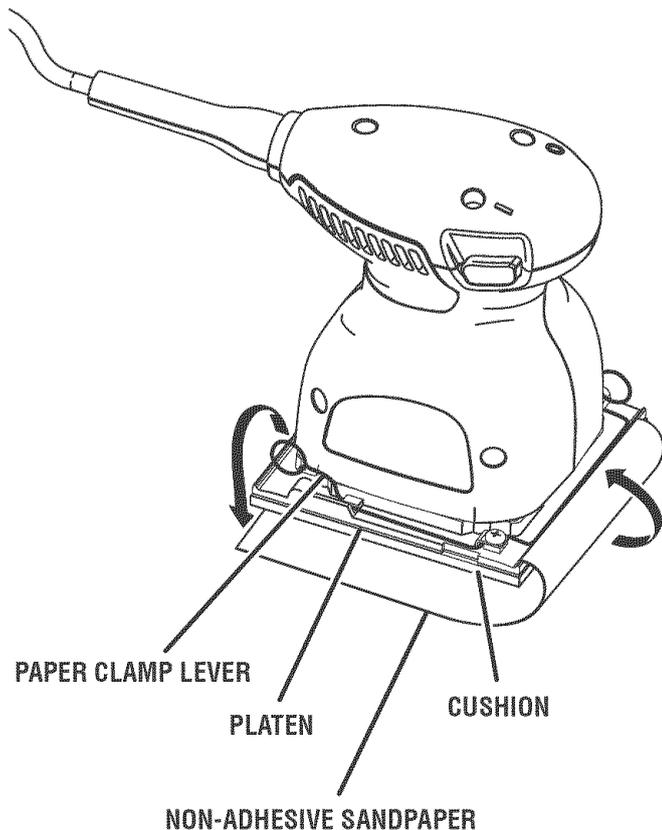


Fig. 2

## INSTALLING ADHESIVE SANDPAPER

See Figure 3.

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

- Unplug the sander.
- 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.

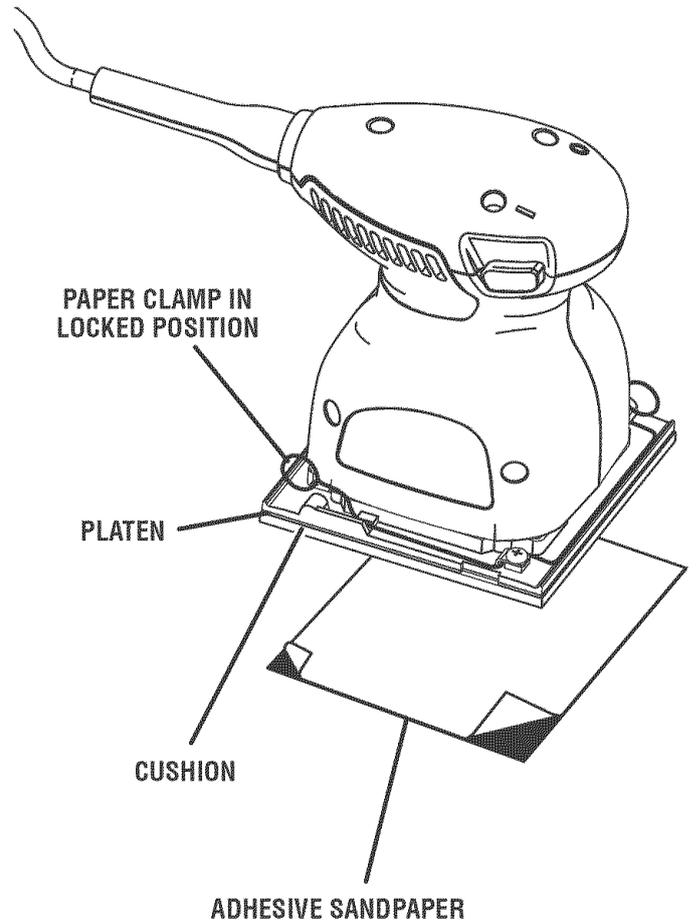


Fig. 3

## OPERATING THE SANDER

See Figures 4 - 5.

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

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

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

# OPERATION

**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 the sander from workpiece before turning off.

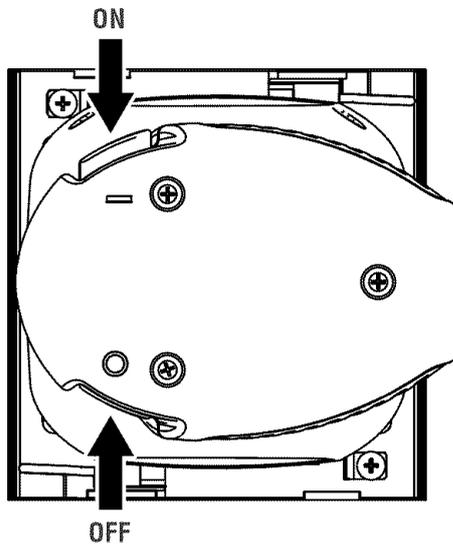


Fig. 4

Flush sanding can be performed with the sander. The front edge of the 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 the sander off.

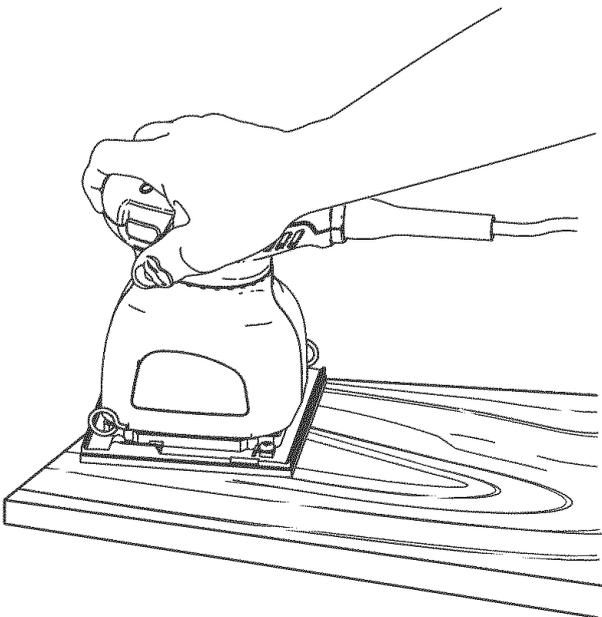


Fig. 5

## ORBITAL MOTION

See Figure 6.

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. The sandpaper moves in tiny circles at a very high speed, allowing the sander to move easily.

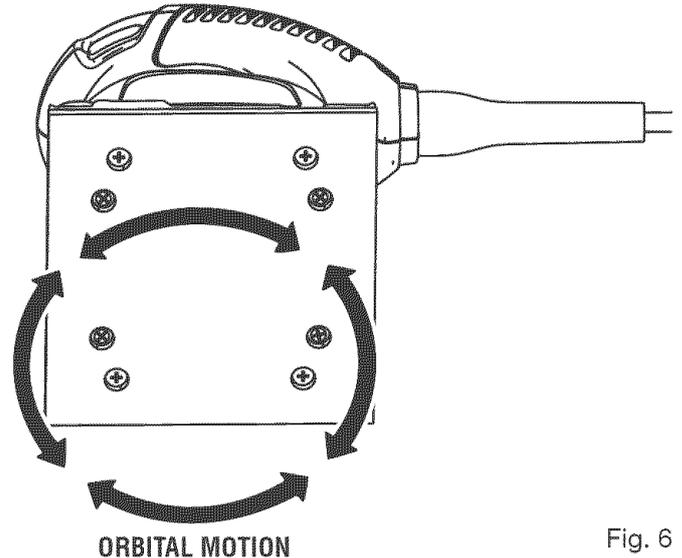


Fig. 6

## REMOVING SANDPAPER BEFORE STORAGE

Do not store the 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.

# MAINTENANCE

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

 **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.

## GENERAL MAINTENANCE

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. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

Electric tools used on fiberglass material, wallboard, spackling compounds, or plaster are subject to accelerated wear and possible premature failure because the fiberglass chips and grindings are highly abrasive to bearings, brushes, commutators, etc. Consequently, we do not recommend using this tool for extended work on these types of materials. However, if you do work with any of these materials, it is extremely important to clean the tool using compressed air.

## 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.

Only the parts shown on the parts list are intended to be repaired or replaced by the customer. All other parts should be replaced at a Sears Service Center.

# ACCESSORIES

The following recommended accessories are currently available at Sears retail stores:

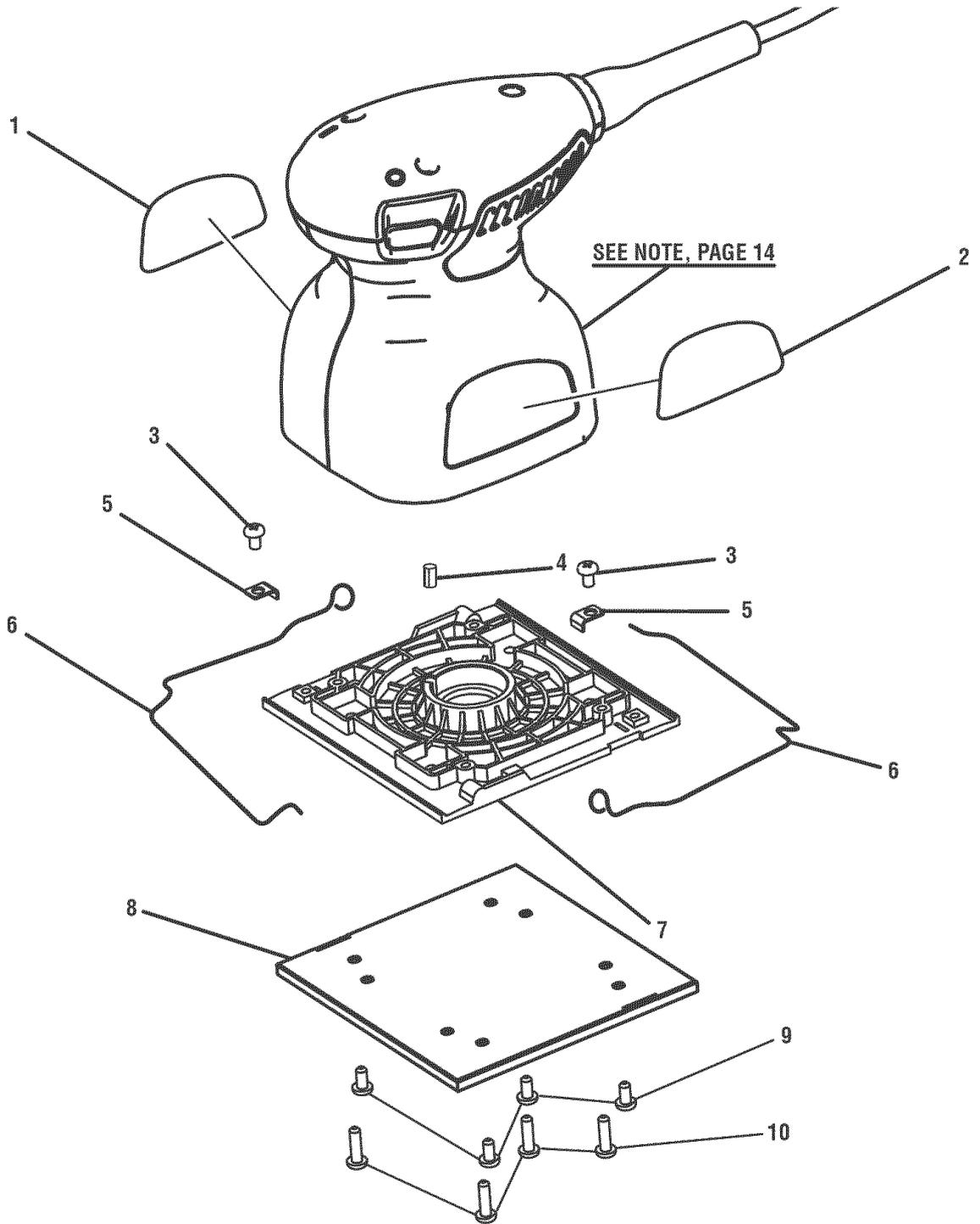
- Aluminum Oxide Sheets with Paper Backing (1/4 Sheet)  
X-Fine, Fine, Medium, Coarse
- Pressure Sensitive Adhesive, Paper Backed Sheets (1/4 Sheet)  
X-Fine, Fine, Medium, Coarse

The following standard 4-1/2 in. x 11 in. Sanding Sheets can be cut to fit the sander:

- Non-Loading Aluminum Oxide Sanding Sheets  
X-Fine, Fine, Medium, Coarse

 **WARNING:** Current attachments and accessories available for use with this tool are listed above. Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

CRAFTSMAN PALM GRIP FINISHING SANDER – MODEL NUMBER 315.116900



**CRAFTSMAN PALM GRIP FINISHING SANDER – MODEL NUMBER 315.116900**

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

**SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS**

**PARTS LIST**

Key No.	Part Number	Description	Qty.
1	030155001017	Data Label .....	1
2	030155001014	Logo Label .....	1
3	030155001003	Screw (M4.2 x 8 mm) .....	2
4	030155001007	Rubber Plug .....	1
5	030155001009	Retaining Plate .....	2
6	030155001008	Spring Clamp .....	2
	030155001001	Platen Assembly (Includes Key Nos. 3-9) .....	1
7	030155001006	Platen .....	1
8	030155001004	Pad Assembly .....	1
9	030155001003	Screw (M4.2 x 8 mm) .....	4
10	030155001002	Screw (M4.2 x 16 mm) .....	4
	***	Sandpaper.....	1
	983000-438	Operator's Manual	

**NOTE: 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.**

**\*\*\* Complete assortment available at your Nearest Sears Retail Store**