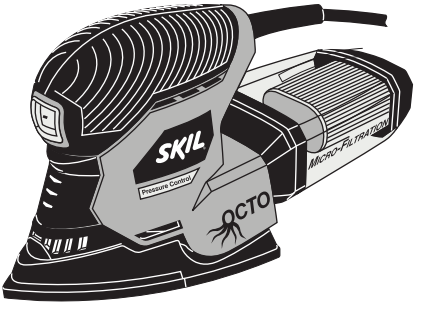
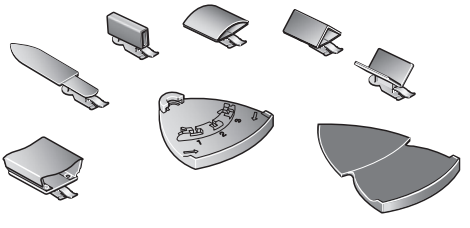
IMPORTANT:
Read Before Using

Operating/Safety Instructions

7302





SKIL

General Power Tool Safety Warnings

⚠ WARNING **Read all safety warnings and instructions.** Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

Keep work area clean and well lit. Cluttered or 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 children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

Do not 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 for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

If operating the power tool in damp locations is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected supply. Use of an GFCI 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 a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and / or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.

Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

Power tool use and care

Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.

Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Service

Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Safety Rules for Orbital Sanders

Hold power tools 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 tool "live" and shock the operator.

Unplug the sander before changing accessories. Accidental start-ups may occur if sander is plugged in while changing an accessory.

Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.

Your tool is equipped with a dust canister, empty it frequently, after completion of sanding and before storing the sander. Be extremely careful of dust disposal, materials in fine particle form may be explosive. Do not throw sanding dust on an open fire. Combustion from mixture of varnishes, lacquers, polyurethane, oil or water with dust particles can occur if there is a static discharge, spark introduced in the box, or excessive heat.

Always wear eye protection and a dust mask for dusty applications and when sanding overhead. Sanding particles can be absorbed by your eyes and inhaled easily and may cause health complications.

Use special precautions when sanding chemically pressure treated lumber, paint that may be lead based, or any other materials that may contain carcinogens. A suitable breathing respirator and protective clothing must be worn by all persons entering the work area. Work area should be sealed by plastic sheeting and persons not protected should be kept out until work area is thoroughly cleaned.

Do not wet sand with this sander. Liquids entering the motor housing is an electrical shock hazard.

Do not use sandpaper intended for larger sanding pads. Larger sandpaper will extend beyond the sanding pad causing snagging, tearing of the paper or kick-back. Extra paper extending beyond the sanding pad can also cause serious lacerations.

Additional Safety Warnings

GFCI and personal protection devices like electrician's rubber gloves and footwear will further enhance your personal safety.

Do not use AC only rated tools with a DC power supply. While the tool may appear to work, the electrical components of the AC rated tool are likely to fail and create a hazard to the operator.

Keep handles dry, clean and free from oil and grease. Slippery hands cannot safely control the power tool.

Develop a periodic maintenance schedule for your tool. When cleaning a tool be careful not to disassemble any portion of the tool since internal wires may be misplaced or pinched or safety guard return springs may be improperly mounted. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia, etc. may damage plastic parts.

Risk of injury to user. The power cord must only be serviced by a Skil Factory Service Center or Authorized Skil Service Station.

⚠ 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 (potential)
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
kg	Kilograms	Weight
min	Minutes	Time
s	Seconds	Time
⌀	Diameter	Size of drill bits, grinding wheels, etc.
n_0	No load speed	Rotational speed, at no load
n	Rated speed	Manufacturers rated speed
.../min	Revolutions or reciprocation per minute	Revolutions, strokes, surface speed, orbits etc. per minute
0	Off position	Zero speed, zero torque...
1, 2, 3, ... I, II, III,	Selector settings	Speed, torque or position settings. Higher number means greater speed
0 ◢	Infinitely variable selector with off	Speed is increasing from 0 setting
➡	Arrow	Action in the direction of arrow
∿	Alternating current	Type or a characteristic of current
⎓	Direct current	Type or a characteristic of current
≂	Alternating or direct current	Type or a characteristic of current
⧈	Class II construction	Designates Double Insulated Construction tools.
⏚	Earthing terminal	Grounding terminal
⚠	Warning symbol	Alerts user to warning messages
	Li-ion RBRC seal	Designates Li-ion battery recycling program
	Ni-Cad RBRC seal	Designates Ni-Cad battery recycling program
	Read manual symbol	Alerts user to read manual
	Wear eye protection symbol	Alerts user to wear eye protection

Symbols (continued)

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.

This symbol designates that this tool is listed by Underwriters Laboratories.

This symbol designates that this tool is listed by Underwriters Laboratories, to United States and Canadian Standards.

This symbol designates that this tool is listed by the Canadian Standards Association.

This symbol designates that this tool is listed by the Canadian Standards Association, to United States and Canadian Standards.

This symbol designates that this tool is listed by the Intertek Testing Services, to United States and Canadian Standards.

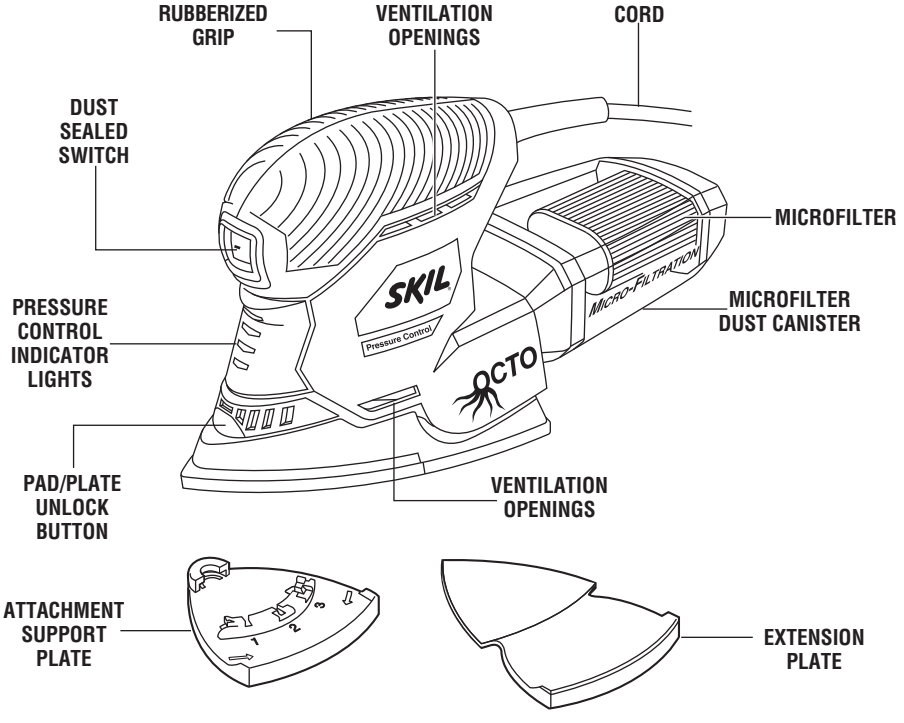
This symbol designates that this tool complies to NOM Mexican Standards.

Functional Description and Specifications

⚠ WARNING **Disconnect the plug from the power source before making any assembly, adjustments or changing accessories**. Such preventive safety measures reduce the risk of starting the tool accidentally.

Multi-Finishing Sander

FIG. 1



Model number	7302
Voltage rating	120 V ∿ 60Hz
Amperage rating	1.2 A
No load speed	n_0 12,000/min

Assembly

⚠ WARNING **Disconnect the plug from the power source before making any assembly, adjustments or changing accessories**. Such preventive safety measures reduce the risk of starting the tool accidentally.

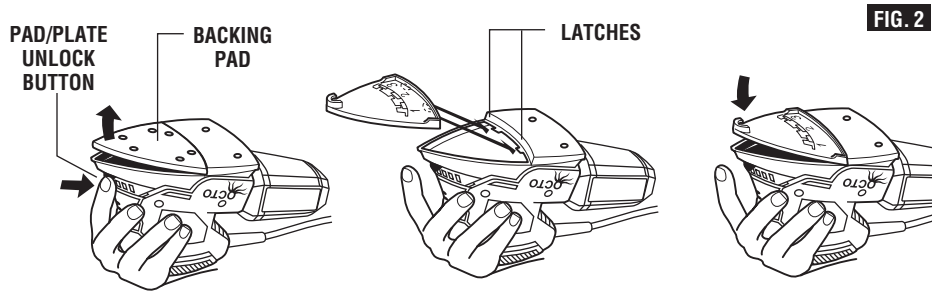
BACKING PAD REMOVAL/INSTALLATION

Your Multi-Finishing sander is equipped with a hook- and-loop rubber backing pad which may be removed and attached without the need of additional tools.

To remove, press the pad/plate unlock button and pull the backing pad free from the sander (Fig. 2.)

To install, engage rear of backing pad under latched in tool's recess and press front of backing pad in place until it engages with a "Click" sound (Fig. 2).

FIG. 2



ROTATING BACKING PAD

For maximum use of abrasive, rotate pad 120 degrees when tip of abrasive becomes worn Fig. 3).)

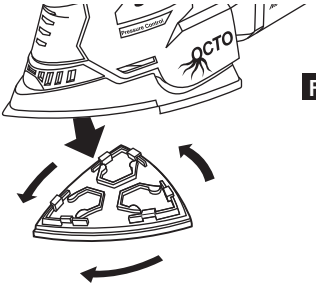


FIG. 3

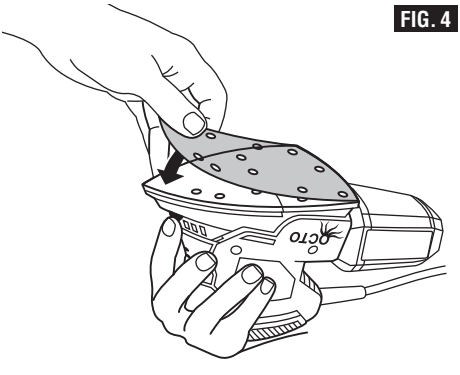
INSTALLING SANDING SHEETS

Your sander uses hook-and-loop backed sandpaper, which firmly grips the backing pad when applied with moderate pressure.

To change, merely peel off the old sandpaper, remove dust from the backing pad if necessary, and press the new sandpaper in place. Be sure to align the sanding sheet holes with the holes in the backing pad to allow the dust extraction system to function (Fig. 4).

After considerable use the backing pad surface will become worn, and the backing pad must be replaced when it no longer offers a firm grip. If you are experiencing premature wear of the backing pad facing, decrease the amount of pressure you are applying during operation of the tool.

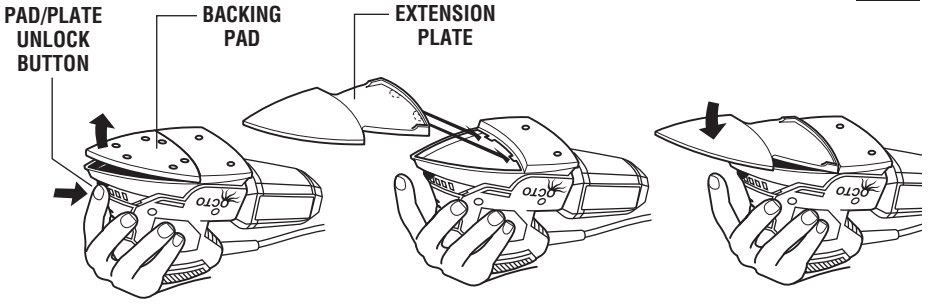
FIG. 4



EXTENSION PLATE

When sanding in extremely tight areas, such as louvered panels, remove the hook-and-loop backing pad and attach the extension plate provided (Fig. 5).

FIG. 5



ATTACHING THE 3-POSITION ATTACHMENT SUPPORT PLATE

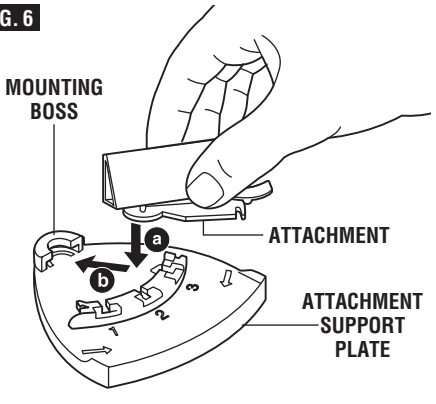
Your sander also features a 3-position attachment support plate. The attachment support plate allows you to easily attach and change the position of accessories provided.

Press the pad/plate unlock button and pull the backing pad free of the sander. Engage rear of 3-position attachment support plate in its recess and press front of pad in place until it engages with a "Click" sound. (Fig. 2).

ATTACHING ACCESSORIES

1. Insert round portion of the attachment into the mounting boss from the side of pad (Fig. 6).

FIG. 6



2. Swing attachment in direction of arrow **C** flat against pad until rear portion of attachment slides underneath the the adjustment rail (Fig. 7).

3. Lift up on release tab, swing attachment to notch and release tab.

To change position of attachment, simply lift release tab, swing attachment to desired notch and release tab to secure attachment (Fig. 8).

FIG. 7

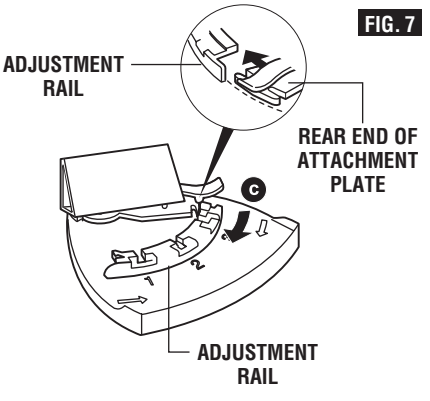
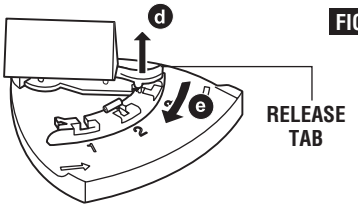
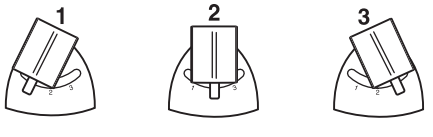


FIG. 8





Operating Instructions

ROCKER "ON/OFF" SWITCH

TO TURN THE TOOL "ON" depress the dust-protected switch to the number "I" position (Fig. 1).

TO TURN THE TOOL "OFF": depress switch to the number "0" position.

Always hold the sander off the work when turning the switch "ON" or "OFF". Contact the work with the tool after sander has reached its full speed and remove it from the work before turning the switch "OFF". Operating in this manner will prolong switch and motor life and will greatly increase the quality of your work.

PRESSURE CONTROL

Your tool is equipped with pressure control indicator lights. The indicator lights will let you know if you are applying the proper amount of pressure during operation. If the green indicator lights are illuminated you are applying the correct amount of pressure. If the red indicator light illuminates you are applying too much pressure and you need to apply less pressure (Fig. 9).

Pressure control feature is intended for use with standard Delta backing pad.

MICROFILTER DUST CANISTER

The integral dust extraction system collects sanding dust in canister supplied with your sander. For maximum efficiency, the dust canister should be emptied frequently during operation.

⚠ WARNING **Your tool is equipped with a dust canister, empty it frequently, after completion of sanding and before storing the sander.** Be extremely careful of dust disposal, materials in fine particle form may be explosive. Do not throw sanding dust on an open fire. Combustion from mixture of varnishes, lacquers, polyurethane, oil or water with dust particles can occur if there is a static discharge, spark introduced in the box, or excessive heat.

REMOVING AND INSTALLING DUST CANISTER

To remove dust canister, simply pull away from the tool (Fig. 9).

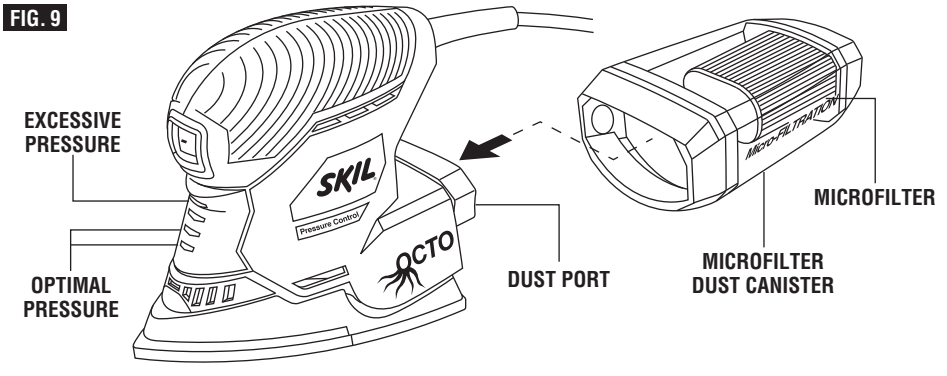
To install dust canister, align dust port with hole in canister and push canister onto tool.

CLEANING AND EMPTYING THE DUST CANISTER

Knock excess dust out of the microfilter, or remove dust with your fingers or a soft brush. You may notice that all the dust may not come out of the canister. This will not affect sanding performance but will reduce dust collection efficiency.

NOTE: Do not wash the micro filter with soap and water. Dust may become more firmly lodged in the pores, which will reduce dust collection, and damage the micro filter.

FIG. 9



Tool Tips

This tool is particularly suitable for one handed operation, and access to corners and edges that are otherwise difficult to reach and require hand sanding. Profiles and grooves may be finished using the tip or edge of the selected attachment, which should occasionally be rotated during use to distribute the wear on the attachment and backing pad surface.

Always be certain that smaller workpieces are securely fastened to a bench or other support. Larger panels may be held in place by hand on a bench or sawhorses.

SANDING: Open-coat aluminum oxide sanding sheets are recommended for most wood or metal sanding applications, as this synthetic material cuts quickly and wears well. Some applications, such as metal finishing or cleaning, require special abrasive pads which are available from your dealer. For best results, use sanding and polishing accessories which are of superior quality and are carefully selected to produce professional quality results with your sander.

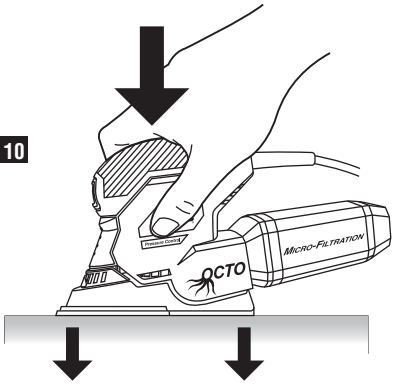
The following suggestions may be used as a general guide for abrasive selection, but the best results will be obtained by sanding a test sample of the workpiece first.

Grit	Application
Coarse	For rough wood or metal sanding, and rust or old finish removal.
Medium	For general wood or metal sanding
Fine	For final finishing of wood, metal, plaster and other surfaces.
Extra fine	For final sanding of bare wood, smoothing old paint, or preparing a finished surface for recoating.

With the workpiece firmly secured, turn tool on as described above. Contact the work with the tool after the sander has reached its full speed, and remove it from the work before switching the tool off. Operating your sander in this manner will prolong switch and motor life, and greatly increase the quality of your work.

Move the sander in long steady strokes parallel to the grain using some lateral motion to overlap the strokes by as much as 75%. DO NOT apply excessive pressure — let the tool do the work. Excessive pressure will result in poor handling, vibration, and unwanted sanding marks (Fig. 10).

FIG. 10



If the surface is rough, begin with coarser grits and then complete the surfacing with medium and fine abrasives. To avoid uneven results, do not skip more than one grit size when going from coarser to finer, and do not sand in one area for too long. When the job is completed, gently lift the tool from the work surface and slide switch to the "OFF" position.

POLISHING: Your Multi-finishing sander may be fitted with optional abrasive mesh or polishing pads to polish or remove scratches or corrosion from metal, painted, or other surfaces. The tool is operated in much the same way as when sanding, but the following points should be observed;

Use light pressure and a circular or overlapping motion to remove scratches and corrosion or polish a surface. If using a compound, use only as much as necessary and do not use the dust extraction feature.

When working in very confined areas or louvered panels, the pad extension plate should be used.

Clean the buffing or mesh pads with mild detergents and warm water. DO NOT use solvents.

Application Advise

Use the tool with its standard backing pad for large work surfaces, corners and edges (Fig. 11).

Use the tool with special sanding attachments for hard to reach areas (Fig. 12).

The flexible sanding attachment is intended for rounding edged surfaces (Fig. 13a).

The flexible sanding can also be used on all rounded surfaces with a maximum diameter of 10 cm (Fig. 13b).

FIG. 11

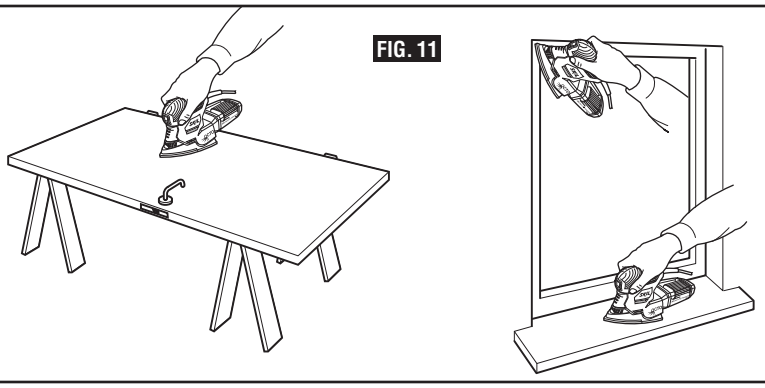


FIG. 12

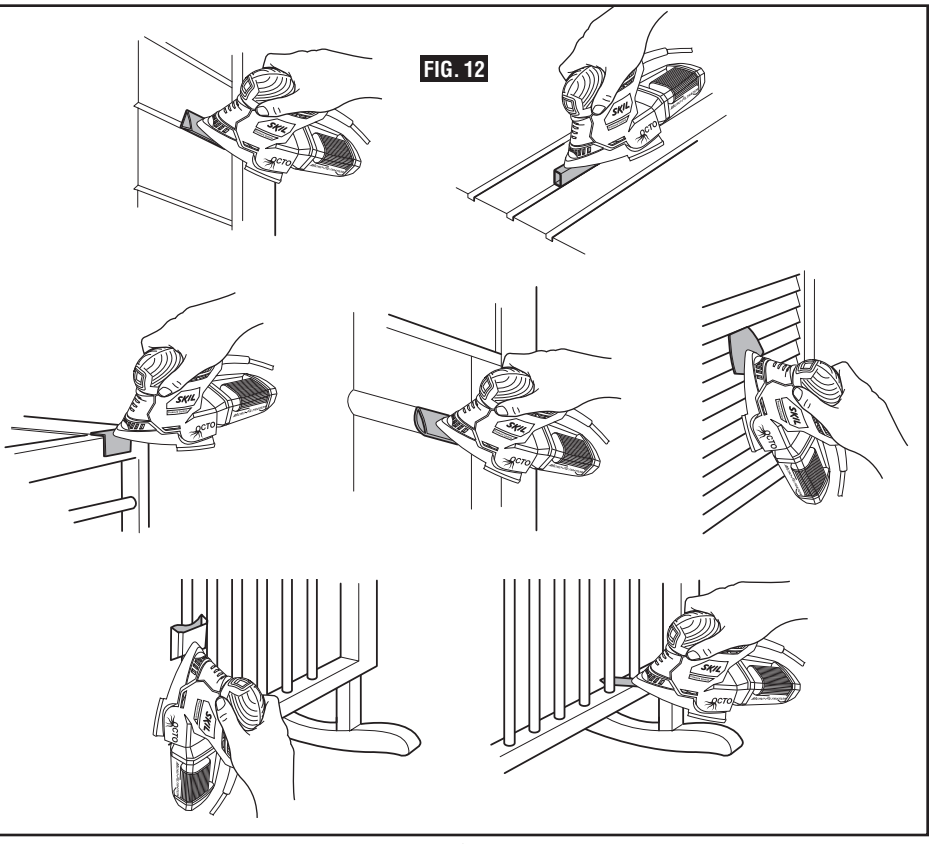


FIG. 13a

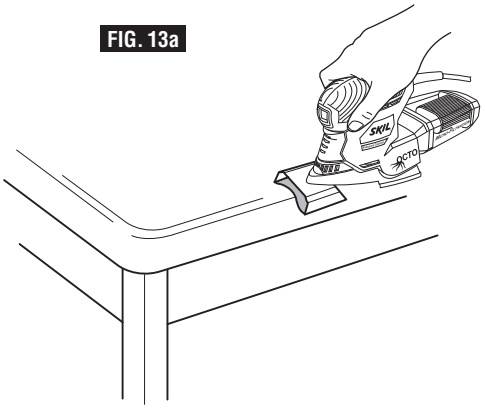
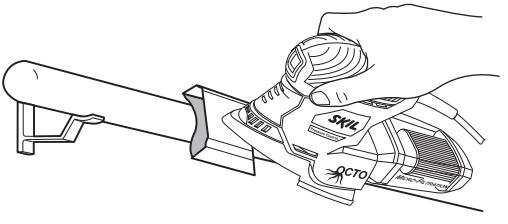


FIG. 13b



Maintenance

Service

⚠ WARNING Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components which could cause serious hazard. We recommend that all tool service be performed by a Skil Factory Service Center or Authorized Skil Service Station.

TOOL LUBRICATION

Your Skil tool has been properly lubricated and is ready to use. It is recommended that tools with gears be regreased with a special gear lubricant at every brush change.

CARBON BRUSHES

The brushes and commutator in your tool have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend every two to six months the brushes be examined. Only genuine Skil replacement brushes specially designed for your tool should be used.

BEARINGS

After about 300-400 hours of operation, or at every second brush change, the bearings should be replaced at Skil Factory Service Center or Authorized Skil Service Station. Bearings which become noisy (due to heavy load or very abrasive material cutting) should be replaced at once to avoid overheating or motor failure.

Cleaning

⚠ WARNING To avoid accidents always disconnect the tool from the power supply before cleaning or performing any maintenance. The tool may be cleaned most effectively with compressed dry air. **Always wear safety goggles when cleaning tools with compressed air.**

Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through openings.

⚠ CAUTION Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

Accessories

⚠ WARNING **If an extension cord is necessary, a cord with adequate size conductors that is capable of carrying the current necessary for your tool must be used.** This will prevent excessive voltage drop, loss of power or overheating. Grounded tools must use 3-wire extension cords that have 3-prong plugs and receptacles.

NOTE: The smaller the gauge number, the heavier the cord.

RECOMMENDED SIZES OF EXTENSION CORDS 120 VOLT ALTERNATING CURRENT TOOLS

Tool's Ampere Rating	Cord Size in A.W.G.				Wire Sizes in mm^2			
	Cord Length in Feet				Cord Length in Meters			
	25	50	100	150	15	30	60	120
3-6	18	16	16	14	0.75	0.75	1.5	2.5
6-8	18	16	14	12	0.75	1.0	2.5	4.0
8-10	18	16	14	12	0.75	1.0	2.5	4.0
10-12	16	16	14	12	1.0	2.5	4.0	—
12-16	14	12	—	—	—	—	—	—

* (8) Attachments
* (32) Pieces of abrasives
* (1) Carrying bag

(*= standard equipment)

(**= optional accessories)

Trouble Shooting

⚠ WARNING Read instruction manual first! Remove plug from the power source before making adjustments or assembling accessories.

TROUBLE: TOOL WILL NOT START

PROBLEM
1. Power cord is not plugged in.
2. Power source fuse or circuit breaker tripped.
3. Cord damaged.
4. Burned out switch.

REMEDY
1. Plug tool into power source.
2. Replace fuse or reset tripped circuit breaker. (If the product repeatedly causes the circuit or fuse to trip/blow, discontinue use immediately and have it serviced by an Authorized Skil Service Center or Service Station.)
3. Inspect cord for damage. If damaged, have cord replaced by an Authorized Skil Service Center or Service Station.
4. Have switch replaced by an Authorized Skil Service Center or Service Station.

TROUBLE: TOOL DOES NOT COME UP TO SPEED

PROBLEM
1. Extension cord has insufficient gauge or is too long.
2. Low house voltage.

REMEDY
1. Replace with adequate extension cord (Page 14).
2. Contact your electric company.