

# ***Mastercraft***

## **DETAIL SANDER/POLISHER**

Model 54-7238-6



### **Operation and Safety Instructions**



## Table of contents

SECTION	PAGE
I. Technical data .....	2
II. General safety rules .....	3
III. Specific safety rules for the detail sander/polisher ..	5
IV. Electrical information .....	6
V. Know your sander .....	8
VI. Assembly and adjustments .....	9
VII. Operation .....	11
VIII. Maintenance .....	14
IX. Troubleshooting guide .....	15
X. Warranty .....	16

## I. Technical data

### DETAIL SANDER/POLISHER

MODEL NUMBER: 54-7238-6

#### MOTOR:

Power Source: 120V AC, 60Hz, 0.8A  
Single Speed: 12,000 OPM  
Construction: BALL BEARING  
Double Insulated: YES

#### BACKING PAD:

Pad Type: HOOK AND LOOP FASTENING SYSTEM

CORD: 6' 6" (198 cm), 2-PRONG POLARIZED

NET WEIGHT: 2 Lb 5 Oz (1.04 kg)

CUL: E184584

## II. General safety rules

Safety is a combination of common sense, staying alert and knowing how to use your detail sander/polisher.

**WARNING:** TO AVOID MISTAKES THAT COULD CAUSE SERIOUS INJURY, DO NOT PLUG IN THE DETAIL SANDER/POLISHER UNTIL THE FOLLOWING STEPS HAVE BEEN READ AND UNDERSTOOD.

1. READ and become familiar with this entire instruction manual. LEARN the tool's applications, limitations, and possible hazards.
2. AVOID DANGEROUS CONDITIONS. DO NOT use power tools in wet or damp areas or expose them to rain. Keep work areas well-lit.
3. DO NOT use power tools in the presence of flammable liquids or gases.
4. ALWAYS keep your work area clean, uncluttered, and well-lit. DO NOT work on floor surfaces that are slippery with sawdust or wax.
5. KEEP BYSTANDERS AT A SAFE DISTANCE FROM the work area, especially when the tool is operating. NEVER allow children near the tool.
6. DO NOT FORCE THE TOOL to do a job for which it was not designed.
7. DRESS FOR SAFETY. DO NOT wear loose clothing, gloves, neckties, or jewellery (rings, watches) when operating tool. They can get caught and draw you into moving parts. ALWAYS wear non-slip footwear, and tie back long hair.
8. WEAR A FACE MASK OR DUST MASK. The sanding operation produces dust.
9. ALWAYS remove the power cord plug from the electric outlet when making adjustments, changing parts, cleaning or working on the tool.
10. AVOID ACCIDENTAL START-UPS. Make sure the power switch is in the OFF position before plugging in the power cord.
11. DON'T OVERREACH. Keep proper footing and balance at all times. Wear oil-resistant, rubber-soled footwear. Keep floor clear of oil, scrap, and other debris.
12. MAINTAIN TOOLS PROPERLY. ALWAYS keep tools clean and in good working order. Follow instructions for lubricating and changing accessories.

**SAVE THESE SAFETY INSTRUCTIONS**

## II. General safety rules - continued

13. CHECK FOR DAMAGED PARTS. Check for alignment of moving parts, jamming, breakage, or any other conditions that may affect the tool's operation. Any part that is damaged should be properly repaired or replaced before use.
14. MAKE WORKSHOP CHILDPROOF. Use padlocks, master switches, and ALWAYS remove starter keys.
15. DO NOT operate tool if you are under the influence of any drugs, alcohol or medication that could affect your ability to use the tool properly.

**WARNING:** DUST GENERATED FROM CERTAIN MATERIALS CAN BE HAZARDOUS TO YOUR HEALTH. ALWAYS OPERATE THE DETAIL SANDER/POLISHER IN A WELL-VENTILATED AREA AND PROVIDE FOR PROPER DUST REMOVAL. USE DUST COLLECTION SYSTEMS WHENEVER POSSIBLE. WEAR A FACE MASK OR DUST MASK WHEN THE SANDING OPERATION PRODUCES DUST.



### **ALWAYS WEAR EYE PROTECTION.**

A sander can throw foreign objects into your eyes which could cause permanent eye damage.

ALWAYS wear safety goggles (not glasses). Ordinary eyeglasses have only impact resistant lenses...they are NOT safety goggles.

**SAVE THESE SAFETY INSTRUCTIONS**

### **III. Specific safety rules for the detail sander/polisher**

1. IF YOU ARE NOT thoroughly familiar with the operation of the detail sander/polisher, obtain advice from a qualified person.
2. MAKE SURE wiring codes and recommended electrical connections are followed. The detail sander/polisher is double insulated. When servicing, use only identical replacement parts.
3. NEVER turn the detail sander/polisher ON until all tools, scraps of wood, and other debris are removed from the work surface.
4. SECURE YOUR WORK. Use clamps or a vise to hold your workpiece.
5. AVOID awkward hand positions. A sudden slip could cause your hand to contact the sanding disc. Keep hands away from the sanding area.
6. NEVER USE A POWER SANDER FOR WET SANDING OR LIQUID POLISHING. It may result in electrical shock causing serious or fatal injury.
7. INSPECT FOR and remove all nails and staples before sanding. DO NOT sand over nails or staples, or other imbedded foreign material.
8. MAKE all adjustments with the power OFF and the tool disconnected from the power source.
9. KEEP THE HANDLE DRY, CLEAN, AND FREE FROM OIL AND GREASE. Always use a clean cloth when cleaning. Do not use solvents, brake fluids, gasoline or other petroleum products to clean the tool; they may damage plastic parts.
10. ALWAYS use sandpaper (not provided) that has a hook and loop fastening system, and has holes matching the detail sander/polisher's backing pad.

**SAVE THESE SAFETY INSTRUCTIONS**

## IV. Electrical information

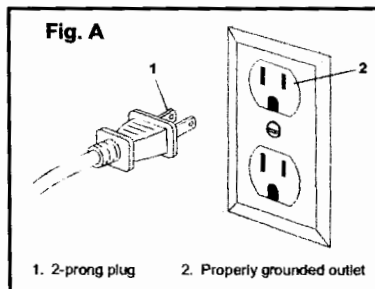
**WARNING:** TO AVOID ELECTRICAL HAZARDS, FIRE HAZARDS, OR DAMAGE TO THE TOOL, USE PROPER CIRCUIT PROTECTION. YOUR DETAIL SANDER/POLISHER IS WIRED AT THE FACTORY FOR 120 V OPERATION. CONNECT TO A 120 V, 15 A CIRCUIT AND USE A 15 A TIME DELAY FUSE OR CIRCUIT BREAKER. TO AVOID SHOCK OR FIRE, WHEN THE POWER CORD IS WORN, CUT OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.

### DOUBLE INSULATED

This detail sander/polisher has a plug that looks like the one shown below:



The detail sander/polisher is double insulated to provide a double thickness of insulation between you and the tool's electrical system. All exposed metal parts are isolated from the internal metal motor components with protective insulation.



**WARNING:** TO AVOID INJURY, WHEN SERVICING THE DETAIL SANDER/POLISHER USE ONLY IDENTICAL REPLACEMENT PARTS.

**WARNING:** DOUBLE INSULATION DOES NOT TAKE THE PLACE OF NORMAL SAFETY PRECAUTIONS WHEN OPERATING THIS TOOL.

### WARNING: TO AVOID ELECTROCUTION:

1. Use only identical replacement parts when servicing a tool with double insulation. Servicing should be performed by a qualified technician.
2. Do not use power tools in wet or damp areas or expose them to rain. This tool is intended for indoor use only.

### GROUNDING INSTRUCTIONS

IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has a POLARIZED plug. The plug **MUST** be plugged into a matching outlet that is properly installed and grounded in accordance with ALL local codes and ordinances.

DO NOT MODIFY THE PLUG PROVIDED. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

**SAVE THESE SAFETY INSTRUCTIONS**

#### IV. Electrical information - continued

**CAUTION: IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE IF IT IS, HAVE A CERTIFIED ELECTRICIAN CHECK THE RECEPTACLE.**

**WARNING:** THIS DETAIL SANDER/POLISHER IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

#### **GUIDELINES FOR USING EXTENSION CORDS**

USE THE PROPER EXTENSION CORD. 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. An undersized cord will cause overheating. The table below shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

##### **Minimum Gauge for Extension Cords (AWG)**

(when using 120 volts only)

Ampere Rating		Total Length of Cord in Feet (metres)			
More Than	Not More Than	25' (7.6 m)	50' (15 m)	100' (30.4 m)	150' (45.7 m)
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Recommended	

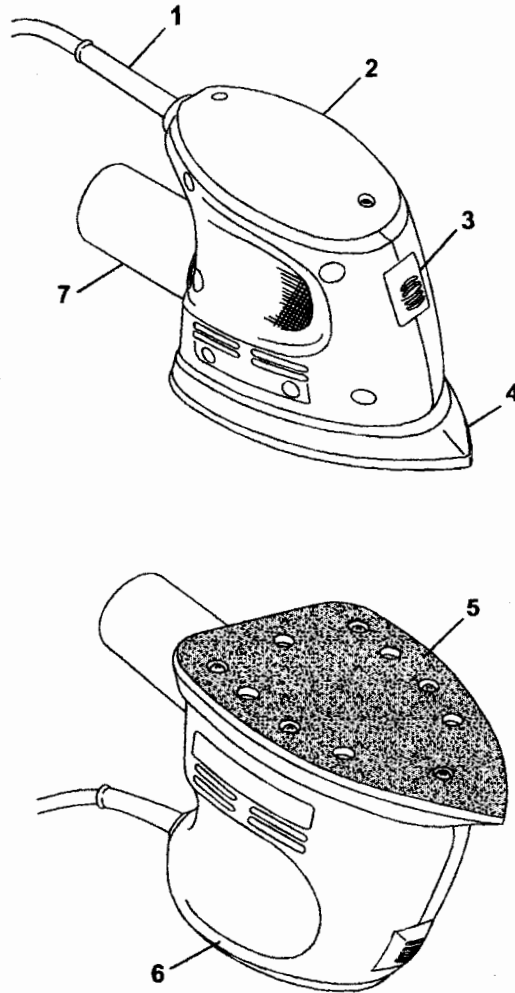
Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

Use a separate electrical circuit for your tools. This circuit should not be less than a #12 wire and should be protected with a 15 A time delay fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

**WARNING:** ALTHOUGH THIS TOOL IS DOUBLE INSULATED, THE EXTENSION CORD AND RECEPTACLE MUST STILL BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRICAL SHOCK.

**SAVE THESE SAFETY INSTRUCTIONS**

## V. Know your detail sander/polisher



- 1. Power cord
- 2. Motor
- 3. ON/OFF switch
- 4. Base
- 5. Backing pad
- 6. Handle
- 7. Universal vacuum adaptor



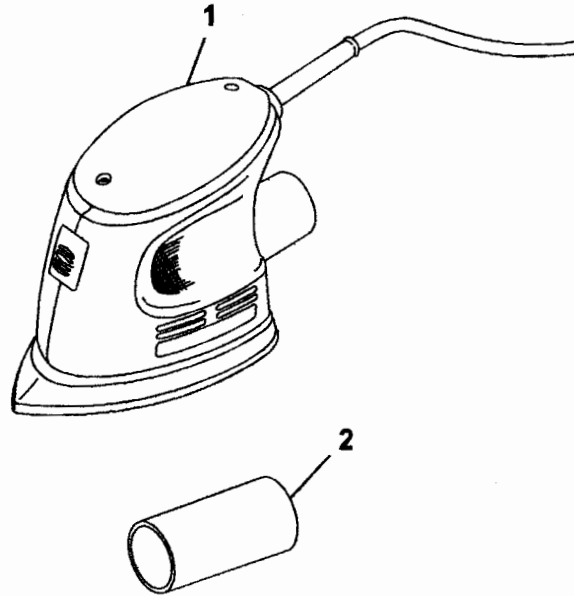
## VI. Assembly and adjustments

### UNPACKING (Fig. 1)

Remove the detail sander/polisher (1) and universal vacuum adaptor (2) from the box and examine carefully.

**NOTE:** Do not discard box or any packaging material until all parts are examined.

Fig. 1



## VI. Assembly and adjustments - continued

### ASSEMBLY INSTRUCTIONS

The detail sander/polisher is assembled and ready for use. However, you need to select and attach the appropriate accessory pad, and attach a vacuum hose, if required.

**WARNING:** IF ANY PART OF THE DETAIL SANDER/POLISHER IS MISSING OR DAMAGED, DO NOT PLUG IT IN UNTIL THE DAMAGED PART IS REPAIRED OR REPLACED.

**WARNING:** TO AVOID INJURY, ALWAYS TURN THE SWITCH OFF AND DISCONNECT THE DETAIL SANDER/POLISHER FROM THE POWER OUTLET BEFORE INSTALLING OR CHANGING THE SAND-PAPER OR ADAPTOR AND VACUUM.

#### Installing and removing the sandpaper (Fig. 2)

Use sandpaper that has a hook and loop fastening system and has holes matching the sandpaper backing pad. Sandpaper must be purchased separately.

##### To install:

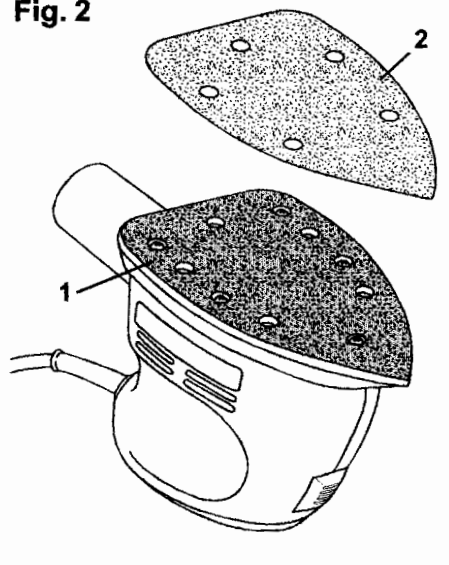
1. Remove all sanding dust or dirt from the backing pad (1).
2. Align the holes on the sandpaper (2) with the holes in the backing pad, making sure it is centered and the edges are aligned with the edges of the backing pad.
3. Press the sandpaper to the pad.

##### To remove:

Peel the sandpaper off the backing pad.

**Note:** The holes in the sandpaper must line up with the backing pad holes for the through-the-pad dust extraction system to function properly.

Fig. 2

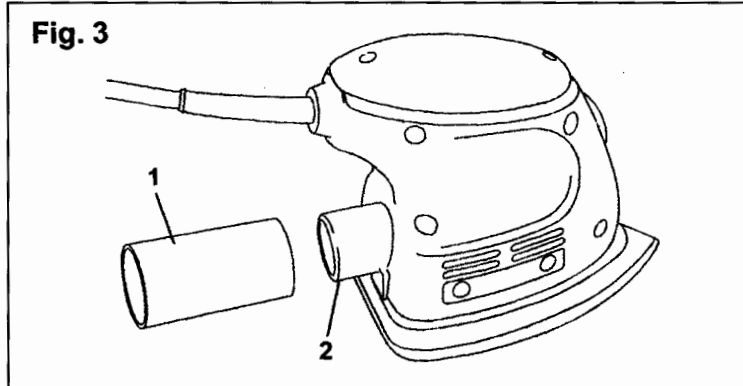


## VI. Assembly and adjustments - continued

### Installing Adaptor (Fig. 3)

1. The universal vacuum adaptor (1) is tapered; one end is smaller than the other. Slide the small end of the adaptor onto the vacuum port (2) at the rear of the detail sander/polisher.
2. For best and safest results, attach a vacuum hose to the universal vacuum adaptor.
3. Turn the vacuum ON before starting the detail sander/polisher.

Fig. 3



## VII. Operation

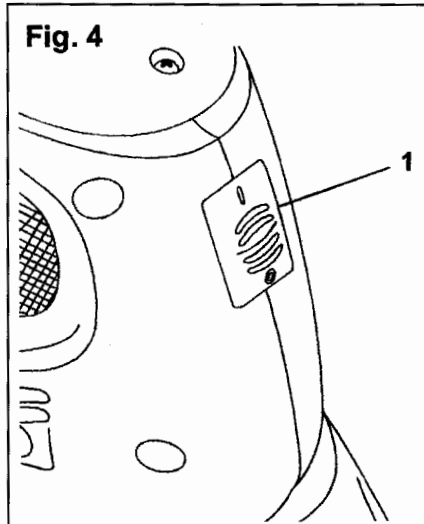
### OPERATING INSTRUCTIONS

#### Switch (Fig. 4)

Your detail sander/polisher is equipped with a rocker ON/OFF switch (1), located on the front of the handle area.

1. To turn the detail sander/polisher ON, push the top (I) of the rocker switch.
2. To turn the detail sander/polisher OFF, push the bottom (O) of the rocker switch.

Fig. 4

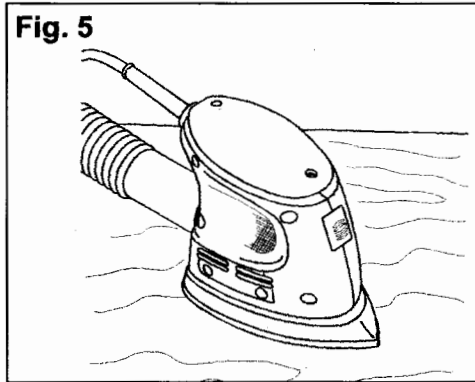


## VII. Operation - continued

**WARNING:** FINISH SANDING CAN PRODUCE CLOUDS OF FINE SANDING DUST THAT COULD IGNITE IN THE PRESENCE OF SPARKS OR AN OPEN FLAME. TO AVOID INJURY, ALWAYS USE YOUR DETAIL SANDER/POLISHER IN A WELL-VENTILATED AREA.

### General Sanding (Fig. 5)

Fig. 5



**WARNING:** DO NOT USE TORN OR SEVERELY WORN SANDPAPER. YOU MAY DAMAGE YOUR WORK SURFACE OR SUFFER PHYSICAL INJURY.

1. Make sure the workpiece is free of nails and other foreign objects that could tear the sandpaper. Move the detail sander/polisher evenly over the entire work surface. The weight of the detail sander/polisher alone is sufficient for normal use. Any excess pressure will alter the sanding action, provide an uneven finish, and cause wear to both the detail sander/polisher and sandpaper. Do not allow the detail sander/polisher to remain in one place on the work surface for too long or excessive material will be removed.
2. Start the detail sander/polisher before applying it to the workpiece.
3. The detail sander/polisher should never be turned off while resting on the workpiece. Lift the detail sander/polisher from the workpiece and then turn it off.
4. Do not use the detail sander/polisher without sandpaper, or the pad will be damaged.
5. For optimum performance, make sure your hand does not cover the air vents on the detail sander/polisher, and make sure oil and water do not come in contact with the motor.
6. Do not make any adjustments to the detail sander/polisher while it is turned on.

**WARNING:** TO AVOID INJURY, ALWAYS UNPLUG THE DETAIL SANDER/POLISHER BEFORE ATTACHING OR REMOVING SANDING DISCS OR THE DUST BAG.

## VII. Operation - continued

### Sandpaper selection (purchase separately)

Sandpaper can be made from various grit materials. The grit material and coarseness of the sandpaper should be selected according to the workpiece material.

Workpiece material	Grit material
Fine woodwork	Garnet or aluminum oxide
Rough woodwork	Aluminum zirconia or ceramic
Manufactured wood products	Silicon carbide or aluminum oxide
Solid surfacing materials	Silicon carbide or aluminum oxide
Metals	Emery or aluminum oxide

The sandpaper is also graded by coarseness. Start your work with an abrasive grit just coarse enough to remove the high spots and excessive roughness. Follow with a second sanding using a grit one or two grades finer. Continue with successively finer grits until you obtain the desired finish.

Do not switch from a coarse grit to a very fine grit in one step. It may be difficult to remove the marks made by the coarse grit abrasive. Use the finest grits practical for the roughing operation, and finish by using successively finer grits.

#### **Coarse Grit 60 - 80**

Initial sanding on rougher surfaces.

For fast stock removal.

Rough sanding and stripping of painted and rusted surfaces.

#### **Medium Grit 100 - 140**

Intermediate sanding.

Removal of minor surface imperfections.

#### **Fine Grit 150 - 220**

Fine sanding.

Sanding prior to staining, priming, or sealing.

## VIII. Maintenance

**WARNING:** ALWAYS TURN OFF THE DETAIL SANDER/POLISHER AND UNPLUG THE TOOL FROM THE OUTLET BEFORE MAINTAINING THE DETAIL SANDER/POLISHER.

### GENERAL MAINTENANCE

Keep your detail sander/polisher clean and in good repair for maximum performance and machine longevity. Before each use inspect the detail sander/polisher, switch, and cord for damage. Check for damaged, missing, or worn parts. Check for loose screws, misalignment, moving parts that are jammed, or any other conditions that may affect the operation. If abnormal vibration or noise occurs, turn the tool off immediately and have the problem corrected before further use. Do not use the detail sander/polisher until properly repaired or replaced.

#### Cleaning

Clean dust and debris from the detail sander/polisher vents. Frequently blow dust out of the motor area, using an air compressor or dust vacuum. Keep the tool clean, dry and free of oil and grease. Use only mild soap and a damp cloth to clean your tool. Certain cleaning agents and solvents are harmful to plastic and other insulated parts. Do not use gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia, or household cleaning detergents containing ammonia.

**WARNING:** TO AVOID FIRE OR TOXIC REACTION, DO NOT USE GASOLINE, NAPHTHA, ACETONE, LACQUER THINNER, OR SIMILAR HIGHLY VOLATILE SOLVENTS TO CLEAN THE DETAIL SANDER/POLISHER.

#### Lubrication

The detail sander/polisher has been lubricated at the factory. Under normal use it will not need further lubrication until the motor brushes need replacing.

#### Replacing carbon brushes

Replace the carbon brushes when they wear down to approximately 1/8" (3 mm), or sparking will occur.

**Note:** Both brushes should be replaced at the same time.

**WARNING:** TO AVOID INJURY, ELECTRIC SHOCK, OR DAMAGE TO THE TOOL, NEVER IMMERSE YOUR DETAIL SANDER/POLISHER IN A LIQUID OR ALLOW A LIQUID TO FLOW INSIDE THE TOOL.

## IX. Troubleshooting

**WARNING:** FOR YOUR SAFETY THIS DETAIL SANDER/POLISHER IS DOUBLE INSULATED. TO AVOID ELECTRICAL SHOCK, FIRE, OR INJURY, USE ONLY PARTS IDENTICAL TO THOSE IN THE PARTS LIST. REASSEMBLE EXACTLY AS THE ORIGINAL ASSEMBLY TO AVOID ELECTRICAL SHOCK.

**WARNING:** TO AVOID MISTAKES THAT COULD CAUSE SERIOUS INJURY, DO NOT PLUG IN THE DETAIL SANDER/POLISHER UNTIL THE FOLLOWING STEPS HAVE BEEN READ AND UNDERSTOOD.

PROBLEM	PROBABLE CAUSE	REMEDY
Detail sander/polisher will not start.	<ol style="list-style-type: none"><li>1. The detail sander/polisher is not plugged in.</li><li>2. The circuit breaker is open or the fuse is blown.</li><li>3. Worn brushes.</li><li>4. Unknown.</li></ol>	<ul style="list-style-type: none"><li>• Make sure the detail sander/polisher is plugged into the power outlet.</li><li>• Check the fuse box and replace the fuse or reset the breaker.</li><li>• Open the brush caps and replace the brushes if worn down to 1/8" (3 mm).</li><li>• Do not operate. Take the detail sander/polisher to an authorized service technician.</li></ul>
Detail sander/polisher has excessive vibration.	<ol style="list-style-type: none"><li>1. The sandpaper is installed incorrectly.</li><li>2. The sanding pad is worn.</li><li>3. Unknown.</li></ol>	<ul style="list-style-type: none"><li>• Make sure the sandpaper is centered on the pad and adheres tightly.</li><li>• Check the pad for wear and replace if necessary.</li><li>• Do not operate. Take the detail sander/polisher to an authorized service technician.</li></ul>

## **X. Warranty**

This power tool is guaranteed for a period of **three (3) years** against defects in workmanship and materials. Should this power tool become defective within the stated warranty period, return it to the store with proof of purchase, and it will be replaced or repaired free of charge.

**This tool is not intended for commercial use.**