#### **READ BEFORE USING**

It is the owner and/or operator's responsibility to study all WARNINGS, operating, and maintenance instructions contained on the product label and instruction manual prior to operation of this polisher/sander. The owner/operator shall retain product instructions for future reference.

The owner and/or operator are responsible for maintenance, maintaining all decals or warning labels and while in use, maintaining the unit in good working order. If the owner and/or operator are not fluent in English, the product warnings and instructions shall be read and discoussed with the operator's native language by the purchaser/owner or his designee. Make sure that the operator comprehends its contents. Safety information shall be emphasized and understood prior to usage. The polisher/sander shall be inspected per the operating instructions.

Users of this polisher/sander must fully understand these instructions. Each person operating this power tool must also be of sound mind and body and must not be under the influence of any substance that might impair vision, dexterity, or judgment.

Protect yourself and others by observing all safety information.

Failure to comply with instructions could result in personal injury and/or property damage!

If you encounter any problems or difficulties, please contact our customer service department at:

#### 1-800-386-0191



This manual is intended for your benefit. Please read and follow the safety, maintenance and troubleshooting steps described within to ensure your safety and satisfaction. The contents of this instruction manual are based upon the latest product information available at the time of publication. The manufacturer reserves the right to make product changes at any time without notice.

### INTRODUCTION

The Vaper® 11 Amp 7 Inch Polisher/Sander is designed for both polishing and sanding. Powered by a durable 11 amp motor, this power tool delivers 3,000 RPM for polishing and sanding applications. Side handle mounts on left or right to provide added control. Designed for years of trouble-free use, it will tackle your sanding and automotive finish maintenance applications with ease.

#### **SAFETY ALERT**

A WARNING Read and understand this entire instruction manual before attempting to assemble, install, operate or maintain this polisher/sander. Failure to comply with the instructions may result in serious personal injury and/or property damage!

The following signal words are used to emphasize safety warnings that must be followed when using this polisher/sander:

**▲** DANGER

Indicates an imminently hazardous situation that, if not avoided, WILL result in death or serious injury.

**A WARNING** 

Indicates a potentially hazardous situation that, if not avoided, COULD result in death or serious injury.

**▲** CAUTION

Indicates a potentially hazardous situation that, if not avoided, MAY result in minor or moderate injury.

A NOTICE

Indicates important information, which if not followed, MAY cause damage to equipment.

#### |uiþiii

# **UNPACKING & INSPECTION**

After opening the carton, unpack your new polisher/sander and related parts & accessories. Please inspect it carefully for any damage that may have occurred during transit. Please check it against the photograph on carton. If any parts are missing, please call customer service at: 1-800-386-0191.

#### Package Contents:

- 1 Polisher/Sander
- 1 Straight Auxiliary Handle
- 1 Rubber PolishingPad
- 1 Polishing Pad Arbor
- 1 Hook & Loop Sanding Pad
- 1 Polishing Bonnet
- 1 Spanner Wrench
- 1 "D" Handle

### **A WARNING**

Do not operate this tool if darnaged during shipment, handling or misuse. Do not operate the tool until the parts have been replaced or the fault rectified. Failure to do so may result in serious personal injury or property damage.

All damaged parts must be repaired or replaced as needed prior to operating this tool.

Check to see that all nuts, bolts and fittings are secure before putting this tool into service. If you have any questions, or require assistance with damaged or missing parts, please contact our factory customer service department at **1-800-386-0191** 

Please have the model number and date of purchase available for reference when calling,

| MODEL NUMBER: 2270 |
|--------------------|
|--------------------|

| DAT | re d | γf I | PH | RC | Ή. | $\Delta S$ |
|-----|------|------|----|----|----|------------|
|     |      |      |    |    |    |            |

#### **SAFETY WARNINGS**

#### READ ALL SAFETY WARNINGS BEFORE USING IMPACT WRENCH

#### **A** WARNING

Some dust created by spraying, blowing, power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Reduce your exposure to these chemicals by wearing approved safety equipment such as dust masks that are designed to filter out microscopic particles. **Avoid inhaling vapors and dust. Wash hands after using.** 

# **▲** WARNING

This product contains chemicals, including lead, known to the State of California to cause cancer, birth defects, and reproductive harm. Wash hands after handling

## **WORK AREA**

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

# **ELECTRICAL SAFETY**

- 1. Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. 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.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 4. Do not abuse the cord. Never use the cord to carry the tool 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**

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enable better control of the tool in unexpected situations.
- 6. **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**

- 1. Use clamps or other practical means to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- 2. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- 3. Do not use tool if switch does not turn it ON or OFF. A tool that cannot be controlled with the switch is dangerous and must be repaired.
- 4. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- 5. Store idle tools out of 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.
- 6. Maintain power tools. 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.
- 7. Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, 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.

# **SAFETY RULES FOR POLISHER/SANDER**

- 1. KNOW YOUR POWER TOOL. Read instruction manual carefully.
- 2. ACCESSORIES MUST BE RATED FOR AT LEAST THE SPEED RECOMMENDED ON THE TOOL WARNING LABEL. Wheels and other accessories running over rated speed can fly apart and cause injury.
- 3. HOLD TOOL BY INSULATED GRIPPING SURFACES WHEN PERFORMING AN OPERATION WHERE THE TOOL MAY CONTACT HIDDEN WIRING OR ITS OWN CORD. Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.
- 4. INSURE THAT THE TOOL IS DISCONNECTED FROM THE POWER SOURCE AND THAT THE SWITCH IS IN "OFF" POSITION before replacing or adjusting the pads or bonnet.
- 5. **USE PROPER SAFETY EQUIPMENT.** Wear safety goggles to protect your eyes and wear a protective mask to minimize breathing in the fine dust created while sanding. NOTE: Some wood contains preservatives which can be toxic. Take extra care to prevent inhalation and skin contact when working with these materials.
- SANDING OF LEAD-BASED PAINT IS NOT RECOMMENDED. Lead based paint should only be removed by a professional.
- 7. RAGS, CLOTHS, CORD, STRING AND THE LIKE SHOULD NEVER BE LEFT AROUND THE WORK AREA.
- 8. ALWAYS USE BOTH HANDS TO OPERATE THE TOOL.
- 9. ALWAYS START AND STOP THE POLISHER/SANDER ON OR AGAINST THE SURFACE BEING POLISHED/SANDED.
- 10. WARNING: There are certain applications for which this tool was designed. Star Asia-USA, LLC strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Star Asia-USA, LLC and we have advised you.

Technical Service Manager Star Asia-USA, LLC P.O. Box 58399 Renton, WA 98058-1369

### **EXTENSION CORD SELECTION**

Replace damaged extension cords immediately. Use of damaged extension cords can shock, burn or electrocute.

If an extension cord is used, make sure the conductor size is large enough to prevent excessive voltage drop which will cause loss of power and possible motor damage. A table of recommended extension cord sizes will be found in this section. This table is based on limiting line voltage drop to 5 volts for 115 volts at 150% of rated amperes. If an extension cord is to be used outdoors it must be marked with the suffix W-A or W following the cord type designation. For example — SJTW-A to indicate it is acceptable for outdoor use.

RECOMMENDED EXTENSION CORD SIZES FOR USE WITH PORTABLE ELECTRIC TOOLS:

| Length o | of Cord | in Feet | t       |         |         |         |         |         |        |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 115V     | 25 ft.  | 50 ft.  | 100 ft. | 150 ft. | 200 ft. | 250 ft. | 300 ft. | 400 ft. | 500 fi |
| 0-2A     | 18      | 18      | 18      | 16      | 16      | 14      | 14      | 12      | 12     |
| 2-3A     | 18      | 18      | 16      | 14      | .14     | 12      | 12      | 10      | 10     |
| 3-4A     | 18      | 18      | 16      | 14      | 12      | 12      | 10      | 10      | 8      |
| 4-5A     | 18      | 18      | 14      | 12      | 12      | 10      | 10      | 8       | 8      |
| 5-6A     | 18      | 16      | 14      | 12      | 10      | 10      | 8       | 8       | 6      |
| 6-8A     | 18      | 16      | 12      | 10      | 10      | 8       | 6       | 6       | 6      |
| 8-10A    | 18      | 14      | 12      | 10      | 8       | 8       | 6       | 6       | 4      |
| 10-12A   | 16      | 14      | 10      | 8       | 8       | 6       | 6       | 4       | 4      |
| 12-14A   | 16      | 12      | 10      | 8       | 6       | 6       | 6       | 4       | 2      |
| 14-16A   | 16      | 12      | 10      | 8       | 6       | 6       | 4       | 4       | 2      |
| 16-18A   | 14      | 12      | 8       | 8       | 6       | 4       | 4       | 2       | 2      |
| 18-20A   | 14      | 12      | 8       | 6       | 6       | 4       | 4       | 2       | 2      |

## **SPECIFICATIONS**

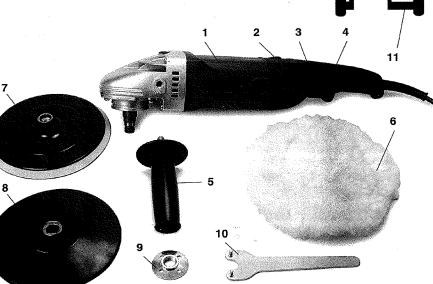
| Amps:                                   |
|---|
| Volts:                                  |
| Variable Speed: (no load) 0 - 3,000 RPM |
| Net weight                              |
| ETI Cartified                           |

## 7" POLISHER/SANDER PARTS

- 1. Motor housing
- 2. Speed Control Dial
- 3. Trigger ON/OFF Switch
- 4. Trigger Lock Button
- 5. Side Handle
- 6. Polishing bonnet
- 7. Hook & Loop Sanding Pad
- 8. Polishing Pad
- 9. Polishing Pad Arbor







## PREPARATION FOR USE FOR SANDING

- 1. Install the Velcro Sanding Pad (7) onto the Motor Housing (1) shaft.
- 2. Attach 7" Diameter Hook and Loop (Velcro) sandpaper (not included) to the sanding pad.
- 3. Attach the Side Handle (5) to the Motor Housing. Right-handed users attach the handle to the left side of motor housing. Left-handed users attach the handle to the right side of motor housing.

# PREPARATION FOR USE FOR POLISHING

- 1. Place the Polishing Pad (8) onto the Motor Housing shaft and turn it until it engages with the flat sides of the shaft to prevent it from slipping on the shaft.
- 2. Place the Polishing Pad Arbor onto the threaded Motor Housing shaft with the flat side facing away from the motor housing. Tighten the arbor with the Spanner Wrench (10).
- 3. Install the Polishing Bonnet (6) over the polishing pad and tie laces firmly. Most automotive finishes require a softer, plusher polishing bonnet to buff waxed finishes. Bonnet is provided with this product.
- 4. Attach the Side Handle (5) to the Motor Housing. Right-handed users attach the handle to the left side of motor housing. Left-handed users attach the handle to the right side of motor housing.

## **OPERATION**

Always hold tool with both handles when operating. To turn tool on, squeeze Trigger On/Off Switch (3).

To turn tool off, release Trigger On/Off Switch.

For use during extended time periods, depress Trigger Lock Button (4) while squeezing Trigger On/Off Switch. This will "lock" the tool in the "On" position allowing you to relax your grip on the trigger to ease fatigue. To turn tool "Off" squeeze and release the Trigger On/Off Switch.

To adjust speed, turn Speed Control Dial (2). "1" is lowest speed, "6" is highest speed.

# **CARE AND MAINTENANCE**

### **A WARNING**

Always be sure that the tool is switched off and has been disconnected from the power source before making any adjustments or performing any maintenance procedures.

- 1) Use only mild soap and a damp cloth to clean tool. DO NOT immerse any part in liquid.
- 2) Avoid contact with solvents, brake fluids, gasoline, or any other petroleum based products as they can damage, weaken or destroy plastics.
- 3) Allow the pad to dry completely after each use.
- 4) Store the polisher/sander with the pad facing upwards to retain pad shape and extend its serviceable life.
- 5) Keep the polisher/sander's air vents unclogged and clean at all times to ensure adequate cooling.
- 6) Remove dust and dirt regularly by wiping with a clean dry cloth.
- 8) Check that all screws are tight at regular intervals as they may loosen over time.
- 9) After each use, wash bonnet by hand in cold water with a mild detergent.
- 10) Remove excess moisture and allow bonnet to dry.
- 11) When not in use, remove the bonnet from the tool.

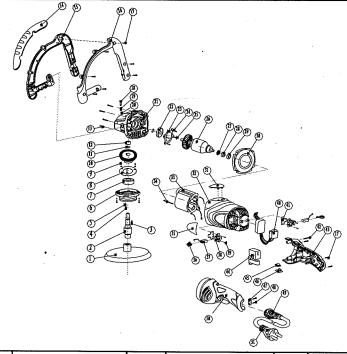
# **SERVICE**

- 1. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel may result in a risk of injury.
- 2. 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.

# **TROUBLESHOOTING GUIDE**

| Problem Encountered         | Possible Cause             | Possible Solution                         |  |  |  |
|-----------------------------|----------------------------|---|--|--|--|
|                             | Power cord not plugged in  | Plug cord into outlet                     |  |  |  |
|                             | Fuse blown or circuit      | Replace fuse or reset circuit breaker     |  |  |  |
|                             | breaker has tripped        |   |  |  |  |
| Tool will not start         | Power cord damaged         | Use authorized service center to repair   |  |  |  |
|                             |                            | or replace power cord                     |  |  |  |
|                             | Faulty switch              | Use authorized service center to repair   |  |  |  |
| -                           |                            | or replace switch                         |  |  |  |
|                             | Faulty motor               | Use authorized service center to repair   |  |  |  |
|                             |                            | or replace motor                          |  |  |  |
|                             | Wrong gauge wire or length | Check chart in instruction manual for     |  |  |  |
|                             | of extension cord          | proper gauge wire and cord length         |  |  |  |
|                             | Tool is overheating        | Turn off tool and allow it to cool down   |  |  |  |
|                             |                            | to room temperature                       |  |  |  |
| Poor performance            | *                          | Inspect and clean ventilation slots       |  |  |  |
| r.<br>Cent                  | Clogged or worn            | Replace sand paper                        |  |  |  |
|                             | sandpaper                  |   |  |  |  |
|                             | Too much polish on         | Replace or clean the bonnet. Ensure       |  |  |  |
|                             | the buffing bonnet         | that too much polish is not applied       |  |  |  |
|                             |                            | onto the bonnet. Remove a portion         |  |  |  |
|                             |                            | of the polish and retry                   |  |  |  |
|                             | Worn bonnet                | Replace with a new bonnet                 |  |  |  |
|                             | Bonnet not secured         | Check bonnet to ensure it is secured      |  |  |  |
| 1                           | :                          | onto the pad. Outer edge of               |  |  |  |
| Vibration or abnormal noise |                            | bonnet must be properly drawn over        |  |  |  |
|                             |                            | the top of the pad                        |  |  |  |
|                             | Loose screws               | Check that all screws are fully tightened |  |  |  |

# **PARTS DIAGRAM**



| No | Description       | No | Description       | No | Description         |
|----|-------------------|----|-------------------|----|---------------------|
| 1  | Polisher Disc     | 18 | Self-Lock Button  | 35 | Label               |
| 2  | Output Spindle    | 19 | Spring            | 36 | Spring              |
| 3  | Key               | 20 | Snap Ring         | 37 | Carbon Brush        |
| 4  | Screw             | 21 | Head              | 38 | Carbon Brush Holder |
| 5  | Washer            | 22 | Bearing           | 39 | Screw               |
| 6  | Head Cover        | 23 | Bearing Cover     | 40 | Derailleur          |
| 7  | Bearing           | 24 | Washer            | 41 | Holder              |
| 8  | Bearing Cover     | 25 | Screw             | 42 | Screw               |
| 9  | Screw             | 26 | Armature          | 43 | Right Handle        |
| 10 | Big Gear          | 27 | Bearing           | 44 | Switch              |
| 11 | Spring Baffle     | 28 | Bearing Sheath    | 45 | Window Of Light     |
| 12 | Needle Bearing    | 29 | Dust-Proof Washer | 46 | Light               |
| 13 | Screw             | 30 | Wind Shield Ring  | 47 | Cord Clamping       |
| 14 | Side Handle Cover | 31 | Plastic Logo      | 48 | Screw               |
| 15 | Left Handle       | 32 | Housing           | 49 | Cable               |
| 16 | Right Handle      | 33 | Stator            | 50 | Left Handle         |
| 17 | Screw             | 34 | Screw             | 51 | Cable Plug          |