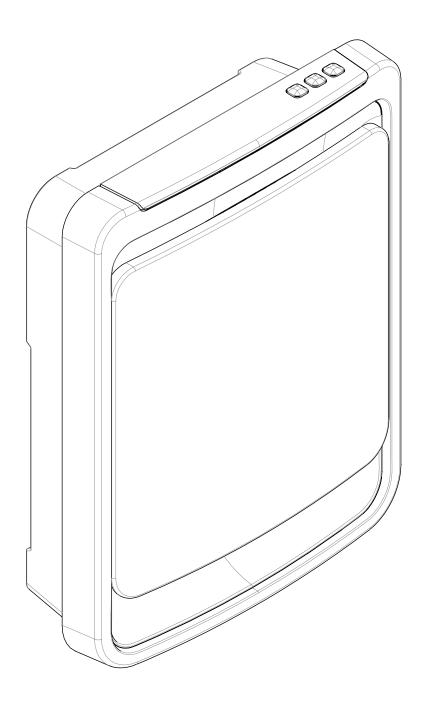


# **USER'S GUIDE**

### SOA SERIES FAN HEATER

REPLACEMENT COMPONENT LIST INCLUDED









### IMPORTANT INSTRUCTIONS

Before installing and using this product, you must read and understand these instructions and keep them for future reference. If the installer and the user do not follow these instructions, the manufacturer cannot be held liable in any way and the warranty will be null and void.

This product must be installed by a qualified person and connected by a **certified electrician**, according to the **electrical and building codes** effective in your region.

For indoor installation only.

The following instructions must be adhered to in order to avoid personal injuries or property damages, serious injuries and potentially fatal electric shocks.

Protect the heating unit with the appropriate circuit breaker or fuse, in accordance with the nameplate.

Make sure the line voltage (volts) is consistent with that indicated on the unit's nameplate.

This unit must be grounded.

Switch off the power at the circuit breaker or fuse before installing, repairing and cleaning the unit.

Make sure the unit is appropriate for the intended use (if needed, refer to the product catalog or a representative).

#### RECOMMENDED HEATING CAPACITY: 1,25 W per cubic foot (0.03 m³)

This corresponds to **10 W per square foot (0.09 m²)** based on a standard ceiling height of **8 feet (2.44 m)**. The recommended capacity is usually sufficient for normal heating needs. Please note that the insulation quality of walls and windows are some of the factors that influence heat losses, which modify the required capacity to heat a room. If needed, speak with a specialist (industrial and commercial buildings) who will be able to calculate these heat losses and optimize the required capacity or consult the "Calculation Tools/Heating Calculator" section of the "STELPRO Design website.

If the unit capacity is insufficient for the size of the room, it will be in operation continuously, and may become defective earlier and turn yellow.

Do not install the unit where objects or pieces of furniture could be heat damaged.

Respect distances and positions indicated in the installation section of this guide.

If the installer or the user modifies the unit, they will be held responsible for any damage resulting from this modification, and the CSA certification could be void.

This unit must not come into contact with a water source and must be protected from splashes (e.g., splashes from a sink or shower). Do not use it if any part has been immersed. Moreover, do not turn it on or off when standing in water or if your hands are wet.

When starting up the unit for the first time or after a long period, it is normal that it produces some temporary odours.

Because this unit is hot when in use, it may pose risks even in normal operation. Therefore, be **careful** and **responsible** when using it. To avoid burns, do not let bare skin touch hot surfaces. The unit must cool down for few minutes since it will stay warm for some time after shut down.

### DANGER – high temperatures may be generated under certain abnormal conditions. Do not partially or fully cover or obstruct the front of this heater.

This unit must be installed at least **6 inches (15 cm)** from any adjacent surfaces and at least **6 inches (15 cm)** from the floor. Make sure objects or pieces of furniture such as, but not limited to, blankets, towels, beds, laundry baskets, clothing, papers, etc. do not come into contact with the unit, and keep them at least **12 inches (30.5 cm)** from the unit. Some materials are more heat-sensitive than others, so make sure those near the unit can withstand heat. Some materials are more heat-sensitive than others, so make sure those near the unit can withstand heat.

Do not install on a wall behind a door.

Never block unit air vents. This obstruction could lead to overheating, which could result in a fire.

## WARNING! NEVER POSITION TOWELS OR ANY OTHER TEXTILE FABRICS IN SUCH A WAY THAT THEY PARTIALLY OR COMPLETELY OBSTRUCT THE PRODUCT. SUCH AN OBSTRUCTION WILL CAUSE THE UNIT TO OVERHEAT, WHICH MAY DAMAGE THE UNIT OR CAUSE A FIRE.

Do not insert or allow foreign objects to enter any air vent as this may cause electric shocks, fires or damages to the unit.

This unit has hot and arcing or sparking parts inside. It is not designed to be used or stored in wet areas or areas containing flammable liquids, combustible materials or corrosive, abrasive, chemical, explosive and flammable substances such as, but not limited to, paint, gasoline, chlorine, sawdust and cleaning products.

Some areas are dustier than others. Thus, it is the user's responsibility to evaluate if the unit must be cleaned based on the amount of dirt accumulated on and inside air vents. Accumulated dirt can lead to a component malfunction or give a yellowish colour to the unit. Failure to install and maintain the unit in accordance with these instructions poses a fire basard

Thermal protection activation indicates that the unit has been subjected to abnormal operating conditions. If the thermal protection remains activated it is recommended that a qualified electrician or a certified repair centre examine the unit in order to make sure it is not damaged. (Refer to the limited warranty.)

If the unit is damaged or defective, discontinue use, cut off power supply at circuit breaker or fuse and have it repaired at a certified repair centre. (Refer to the limited warranty.)

### SAVE THESE INSTRUCTIONS

**NOTE:** When a part of the product specification must be changed to improve operability or other functions, priority is given to the product specification itself. In such instances, the instruction manual may not entirely match all the functions of the actual product. Therefore, the actual product and packaging, as well as the name and illustration, may differ from the manual.

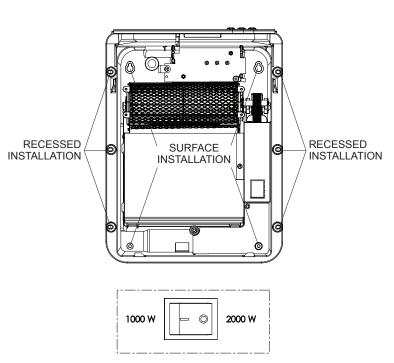


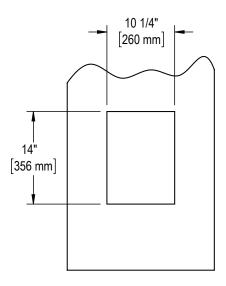
Cut off power supply at circuit breaker/fuse before proceeding to the installation. Use the appropriate screw sets (minimum head diameter 1/4 in (6.5 mm) and anchors according to the wall type and the weight of the product (10 lbs). When drilling into the wall, make sure not to damage the electrical wiring and other hidden utilities.

N.B. This product must be connected by a certified electrician, according to the electrical and building codes effective in your region.

This unit is designed for permanent installation and can be installed two ways.

WARNING – High temperatures may be generated under certain abnormal conditions. Do not partially or fully cover or obstruct the front of this heater.







#### **WARNING!**

NEVER POSITION TOWELS OR ANY OTHER TEXTILE FABRICS IN SUCH A WAY THAT THEY PARTIALLY OR COMPLETELY OBSTRUCT THE PRODUCT. SUCH AN OBSTRUCTION WILL CAUSE THE UNIT TO OVERHEAT.

#### RECESSED DEVICE INSTALLATION

RECOMMENDED HEIGHT: 10 in (254 mm) off the ground (certified at minimum 6 in)

- Make an opening in the wall which is 14 in (356 mm) high by 10 1/4 in (260 mm) wide.
- 2. Remove the screw located underneath the unit and take off the front cover by pulling it gently upwards.
- 3. Remove the electrical wiring compartment cover (1 screw).
- 4. Punch out one of the knock outs and insert the power cable.
- 5. Insert the unit into the wall opening and secure it in place by screwing at least two (2) of the three (3) mounting holes on the outer edging of the unit (min 4 points).
- 6. Make the appropriate electrical connections (see wiring diagram).
- Put the electrical wiring compartment cover back on and screw the unit in place using the previously removed screw.
- If this unit will be controlled by a wall-mounted thermostat (without an integrated thermostat), use the switch above the motor to select the desired power (1000 W or 2000 W model only).
- 9. Put the front cover back on and tighten the screw underneath the unit.

### **SURFACE INSTALLATION**

RECOMMENDED HEIGHT: 10 in (254 mm) off the ground (certified at minimum 6 in)

- Remove the screw located underneath the unit and take off the front cover by pulling it gently upwards.
- 2. Remove the electrical wiring compartment cover (1 screw).
- 3. Punch out one of the knock outs and insert cables.
- Secure the unit using the four (4) holes located on the back of the unit.
- Make the appropriate electrical connections (see electrical wiring diagram).
- 6. Put the electrical wiring compartment cover back on and screw the unit in place using the previously removed screw.
- If this unit will be controlled by a wall-mounted thermostat (without an integrated thermostat), use the switch above the motor to select the desired power (1000 W or 2000 W model only).
- 8. Put the front cover back on and tighten the screw underneath the unit.

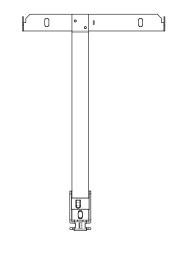
### **INSTALLING THE WALL MOUNT SUPPORT**

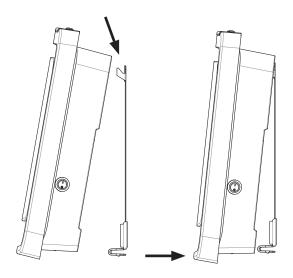
(CORDED UNIT ONLY)

### RECOMMENDED HEIGHT: 10 in (254 mm) FROM THE GROUND (certified at minimum 6 in)

- 1. Remove the wall mount from the unit by pressing the plastic tab at the bottom of the unit.
- Place the wall mount at the desired height, making sure to respect the minimum clearance from the floor.
- Secure the mount to the wall. Make sure it is level by using screw sets (minimum head diameter 1/4 in (6.5 mm)) and anchors according to the wall type and the weight of the product (10 lbs). When drilling into the wall, make sure not to damage the electrical wiring and other hidden utilities.

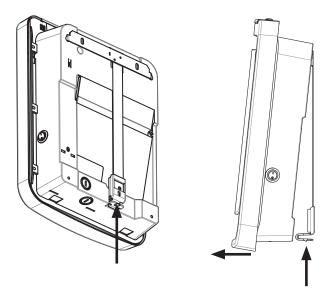
N.B. The wall on which you install the unit must be straight to ensure that the wall mount is installed perfectly flat, with no pressure. It is very important to follow this guideline, so the support is not deformed during installation. Failing to do so could lead to a locking mechanism malfunction.







- 1. Hang the unit on the wall mount's upper hooks.
- 2. Tilt the bottom of the unit, and push it in to make sure it is locked in place.
- 3. The wall-mounted unit should be installed 6 in (15 cm) from the ground.



#### Removing the unit from the wall mount

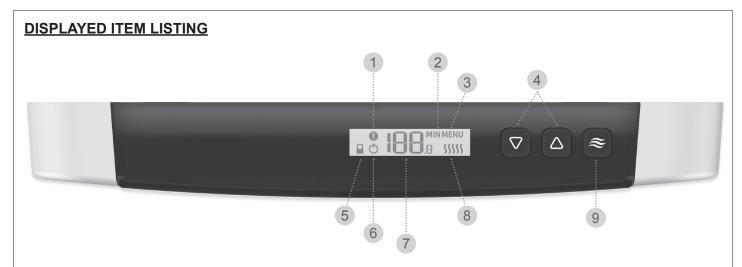
- 1. Press on the plastic tab at the bottom of the unit with a screwdriver.
- 2. Pull on the bottom of the unit out while pressing the tab.
- 3. Remove the unit from the upper hooks.

4

#### WITH A WALL-MOUNTED THERMOSTAT

Choose a thermostat equipped with a TRIAC, which makes it possible to maintain a precise temperature, thus increasing your level of comfort.

### WITH A BUILT-IN ELECTRONIC THERMOSTAT FOR SMART HOMES



- 1 The **①** icon if the unit is overheating.
- 2 Displays the remaining time of the BOOST mode.
- 3 Displayed in advanced menus navigation.
- 4 Buttons used to raise or lower the temperature setpoint. Also used to navigate in the advanced menus
- 5 The control lock icon ☐, (if applicable, see LOCKING THE CONTROLS for more details).
- 6 The O icon is a low setpoint indicator (7°C or lower). If the O icon is flashing, an open window has been detected and the setpoint will be set to 7°C.
- 7 Ambient room temperature (or the temperature setpoint, if the display is flashing). In Boost mode, the Boost mode time remaining.
- 8 Heating power, by heating segments:
  - 0 segments: 0%
  - 1 segments: 1-20 %
  - 2 segments: 21-40 %
  - 3 segments: 41-60 %
  - 4 segments: 61-80 %
  - 5 segments: 81-100 %
- 9 BOOST button.

### ADJUSTING THE TEMPERATURE SETPOINT

- Press one of the two buttons to access the temperature setpoint mode. The temperature setpoint digits will flash.
- The temperature setpoint is set by using the UP ( △ ) or DOWN ( ▽ ) buttons to raise or lower the setpoint respectively by increments of 0.5 °C (1 °F) each time the buttons are pressed. Holding down either button will allow you to scroll more quickly to the desired temperature setpoint.
- Once the desired setpoint has been selected, release the button.
   The display will stop flashing after three (3) seconds and will then display the ambient temperature in the room.
- If the unit has a 120 V power cord, the HIGH and LOW buttons will be red when the unit is powered.
- If the difference between the setpoint and the ambient temperature is greater than 4°C (7°F), the unit will switch to maximum power mode to reach the setpoint faster.

### **SELECTING THE OPERATION MODE**

There unit has two (2) operation modes:

- NORMAL OPERATION MODE
- BOOST MODE
- In normal operation mode, the thermostat follows the setpoint and uses the fan at low speed.
- In BOOST mode, the setpoint increases to the BOOST mode setpoint (26°C by default). When BOOST mode is activated, the fan works faster and more powerfully to raise room temperature quickly. Once the BOOST setpoint is reached, the fan and the power are reduced to maintain the temperature at the BOOST setpoint.
- To activate BOOST mode, press the BOOST button. You can then select the BOOST mode duration: 10, 20, 30 or 60 minutes.
- Once the selection is registered (after 3 seconds), BOOST mode will continue for the determined time or until the BOOST button is pressed again.
- Once the BOOST mode period is over, the unit will keep the fan on to evacuate the residual heat for a maximum of 10 minutes. During this period, the temperature setpoint is displayed and flashes.

### **BUTTON FUNCTIONS**

BUTTONS	MAIN SCREEN	ADVANCED MENUS
HIGH BUTTON OR LOW BUTTON	Set the temperature setpoint*	Browse and edit settings
BOOST BUTTON	Activate/deactivate BOOST mode	Select and confirm BOOST setting (in the BOOST menu)
UP AND DOWN BUTTONS SIMULTANEOUSLY FOR 3 SECONDS	Access advanced menus	Exit advanced menus
BOOST BUTTON FOR 3 SECONDS	Access BOOST menu	Exit BOOST menu
UP AND DOWN BUTTONS SIMULTANEOUSLY FOR LESS THAN 3 SECONDS		Selection in Advanced Menus

<sup>\*</sup>If the UP or DOWN button is pressed during BOOST mode, the BOOST temperature setpoint will flash for 3 seconds but cannot be changed.

### **TEMPERATURE FORMAT**

The temperature can be displayed in either degrees Celsius or Fahrenheit.

Follow these steps to select the temperature format:

- Access the advanced menus.
- Select menu 1.
- Select either °C or °F.

### LOCKING THE CONTROLS



This mode allows you to lock the controls in order to prevent unwanted changes to the setpoint and/or operation modes.

NOTE: The advanced menus remain accessible at all times.

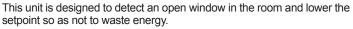
Follow these steps to activate or deactivate the control lock:

- Access the advanced menus.
- Select menu 2 🔒
- Select ON or OFF.

### STANDBY MODE (

In order to protect your home against freezing and limit energy consumption during long absences, set the thermostat to STANDBY mode. To enter this mode, lower the temperature to between 5°C and 7°C until the (¹) icon is displayed.

### OPEN WINDOW DETECTION (



When the convector detects an open window in the room, the  $\ref{thm:converted}$  icon will flash. The setpoint will be automatically set to 7°C (45°F).

Once the convector detects that the window has been closed, the setpoint will return to its previous setting.

Follow these steps to activate or deactivate the open window detection:

- Access the advanced menus.
- Select menu 3 (1)
- Select ON or OFF.

### **BOOST MODE SETTING** $\approx$

By default, Boost mode is set to 26.0°C (79°F).

However, this value can be set from 20.0°C (68°F) to 30.0°C (86°F).

Follow these steps to change the Boost mode setting:

- Access the advanced menus OR access the Boost menu directly by pressing the "Boost" button for 3 seconds.
- Change the setting of menu 4 according to your choice.

### **°STELPRO MENU**

Information about the unit is available in the advanced menus.

Follow these steps to access this information:

- Access the advanced menus.
- Select menu 5.
- Select one of the following sub-menus:
  - · 5.1: Version of unit
  - · 5.2: Day manufactured
  - 5.3: Month manufactured
  - · 5.4: Year manufactured
  - · 5.5: Internal control code
  - · 5.6: Factory reset of unit

#### **UNIT OVERHEAT DETECTION**

This unit can detect when it is overheating.

If your unit's thermal protection gets activated, an  $m{Q}$  icon will flash on the display.

#### **FACTORY RESET**

Follow these steps to reset the unit to its factory settings:

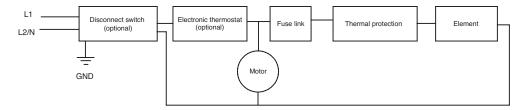
- Access the advanced menus.
- Select menu 5.
- Select sub-menu 5.6.
- Select YES and confirm the selection.
- YES will flash for few seconds and the convector will be reset to its factory settings.

## ELECTRICAL WIRING 🍂

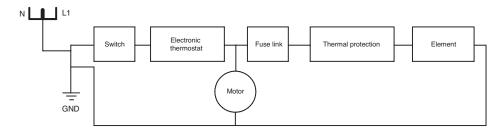
The supply wires must be connected in accordance with all codes in effect. Connect the bare wire (ground) to the unit's ground screw (green). Connect wires from the electrical box to the unit's supply leads.

N.B. This product must be connected by a qualified electrician according to electrical and building codes in effect in your region.

### **FIXED CONNECTION MODELS:**



### **MODEL WITH 120 V PLUG (RESIDENTIAL OUTLET):**



#### This unit is equipped with a three-wire grounding type AC plug:

- For safety reasons, the plug can only be inserted into an outlet with grounding. If you are unable to insert the plug into the outlet, contact your
  electrician to have a suitable receptacle installed. Do not condemn the ground prong of the plug.
- This heater must be plugged into a dedicated 120 V circuit. The addition of other electrical appliances on this circuit may trip the circuit breaker.
- Plug the cord of the heater directly into the wall outlet (do not use an extension cord).
- The power cord is not designed to stowed away at the back of the unit once it is installed and operating.
- The unit can be turned on using the switch on its side. The buttons light up red when the unit is powered.



### **TROUBLESHOOTING**

PROBLEM	DEFECTIVE PART OR PART TO CHECK
The unit does not work	Open circuit breaker or fuse     Faulty connections     Defective thermostat
The unit runs continuously	Heat losses greater than the unit capacity     Temperature setpoint is set too high     Defective thermostat
The housing is extremely hot	Blocked air vents
The desired room temperature cannot be reached	One or more elements in the unit are defective Voltage lower than indicated on the nameplate Heat losses greater than the unit capacity Defective thermostat Fuse link activated
Overheating	Temperature setpoint is set too high     Defective thermostat
The heater is on and the breaker trips	<ul><li>Faulty connections</li><li>Voltage higher than that indicated on the nameplate</li></ul>
The unit does not heat	Thermal protection activated Fuse link activated One of more elements in the unit are defective Defective temperature probe Temperature setpoint set too low Open window detected Defective thermostat
Thermal protection is activated, which translates to ventilation without heat. In the built-in electronic thermostat version, an alarm is also displayed	Blocked air vents The unit must be cleaned (dusty)  Wall-mounted thermostat: To reactivate, first make sure the product did not overheat. Next, the unit must be powered back on: switch off the electrical breaker for 10 minutes, then reset it.  Built-in electronic thermostat version: To reactivate, first make sure the product did not overheat, then press any button to reactivate the system.  If, after a new heat demand, the unit still does not heat, it may be because of a defective internal component or because the thermal fuse link was activated. In that case, contact the customer support.
The temperature setpoint cannot be modified	The unit is locked. Deactivate the control lock (□) BOOST mode is active
The unit does not stop instantly after the setpoint is set below ambient temperature	• The unit is cooling off after heating. The fan continues to work for a time after heating has stopped.

N.B. If you do not solve the problem after checking these points, cut off the power supply at the main electrical panel and contact our customer service (please refer to the LIMITED WARRANTY to obtain the phone numbers)

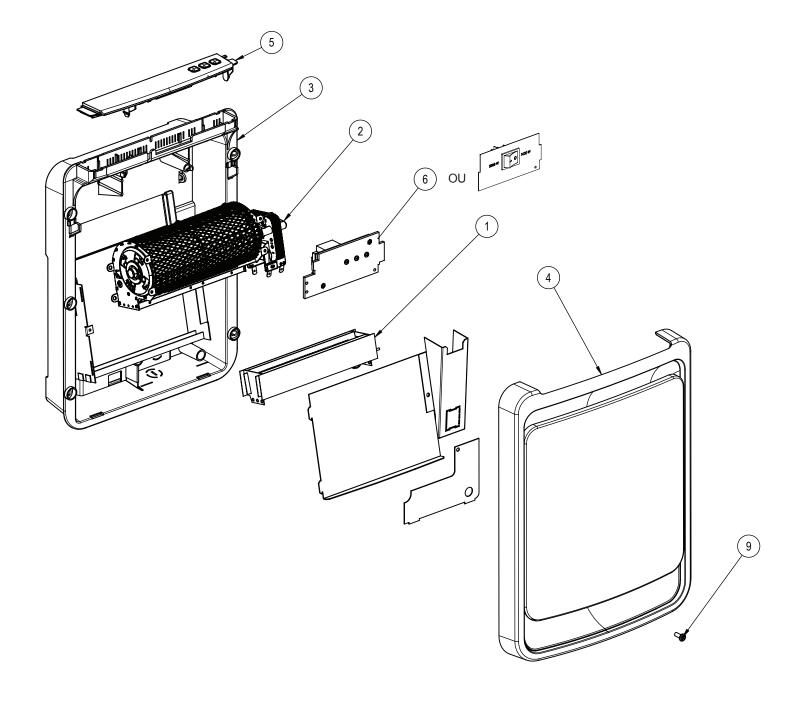
### **ERROR CODES**

CODE	DEFINITION
LO	Temperature lower than 0 °C (32 °F), the unit will always heat.
HI	Temperature higher than 50°C (122°F), the unit will never heat.
	In the temperature field: Defective temperature probe, heating not possible. Call customer service for assistance.
E1	Defective auxiliary temperature probe. The unit will still control the temperature, but the performance of the thermostat may be diminished. Call customer service for assistance.

### REPLACEMENT COMPONENTS LIST

RÉF. #	PART #	DESCRIPTION
1	ELF-043	240 V ELEMENT WITH INTEGRATED PROTECTION
	ELF-044	120 V ELEMENT WITH INTEGRATED PROTECTION
2	MO-087	240 V MOTOR/FAN
	MO-089	120V MOTOR/FAN
3	P-SORB00D0	HOUSING
4	KIT-SOA01	FRONT COVER
	KIT-SOA02	FRONT COVER WITHOUT THERMOSTAT

RÉF. #	PART #	DESCRIPTION
5	ST-292	THERMOSTAT
	ST-293	THERMOSTAT
6	CIR-052 or CIR-053	THERMOSTAT POWER SUPPLY
	SWI-051	INTERRUPTEUR (MODELS WITHOUT BUILT-IN THERMOSTAT)
7	CD-013	POWER CORD (SOA1501PW MODEL ONLY)
8	SWI-052	I/O SWITCH (SOA1501PW MODEL ONLY)
9	S-050/10/QT/MS	FACADE SCREWS: MECANICAL SCREW, BUTTON HEAD, QUADREX, 1/2", 10-24



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### MAINTENANCE 🍂

N.B.: In order for the warranty to remain valid, the unit's air intake and output vents and interior must be cleaned on a regular basis.

Always cut off the power at the breaker or fuse prior to cleaning the unit. Use a soft rag to dust the unit or a damp cloth to clean it. In order to prevent yellowing and/or damage to the product finish, do not use cleaning products (chemical or abrasive). Regularly use a vacuum brush to remove dust and any other foreign objects from the grill if the product is installed in a very dusty area. Note that cigarette smoke can accelerate the yellowing of the discharge grill. More frequent cleanings are recommended in these conditions.

N.B. High voltage and the risk of electric shock are present in the unit even if the thermostat is set to off. Therefore, you can receive an electrical shock as long as the unit is under power.

Do not use cleaning products identified with the following symbols:







#### DO NOT USE:

- chlorine or chlorine-based cleaners.
- scrubbing pads or other scrubbing devices (steel wool).
- abrasive cleaning agents.
- hydrochloric acid-based products such as bleach.

#### LIMITED WARRANTY LIMITED WARRANTY LIMITED WARRANTY LIMITED WARRANTY LIMITED WARRANTY

### LIMITED WARRANTY

This limited warranty is offered by "STELPRO Design inc. (""STELPRO") and applies to the following product made by "STELPRO: SOA model. **Please read this limited warranty carefully.** Subject to the terms of this warranty, "STELPRO warrants its products and their components against defects in workmanship and/or materials for the following periods from the date of purchase: **5 years (3 years on electronic components)**. This warranty applies only to the **original purchaser**; it is non-transferable and cannot be extended.

#### **CLAIM PROCEDURE**

If at any time during the warranty period the unit becomes defective, you must cut off the power supply at the main electrical panel and contact 1) your installer or distributor, 2) your service center or 3) "STELPRO's customer service department. In all cases, you must have a **copy of the invoice** and provide the **information written on the product nameplate**. "STELPRO reserves the right to examine or to ask one of its representatives to examine the product itself or any part of it before honoring the warranty. "STELPRO reserves the right to replace the entire unit, refund its purchase price or repair a defective part. Please note that repairs made within the warranty period must be authorized in advance in writing by "STELPRO and carried out by persons authorized by "STELPRO."

Before returning a product to "STELPRO, you must have a "STELPRO authorization number (RMA). To obtain it, call the customer service department at: **1-800-363-3414** (electricians and distributors - French), **1-800-343-1022** (electricians and distributors - English), or **1-866-766-6020** (consumers). The authorization number must be clearly written on the parcel or it will be refused.

#### CONDITIONS, EXCLUSIONS AND DISCLAIMER OF LIABILITY

This warranty is exclusive and in lieu of all other representations and warranties (except of title), expressed or implied, and "STELPRO expressly disclaims and excludes any implied warranty of merchantability or implied warranty of fitness for a particular purpose.

°STELPRO's liability with respect to products is limited as provided above. °STELPRO shall not be subject to any other obligations or liabilities whatsoever, whether based on contract, tort or other theories of law, with respect to goods or services furnished by it, or any undertakings, acts or omissions relating thereto. Without limiting the generality of the foregoing, °STELPRO expressly disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits, loss of use of equipment, cost of capital, cost of substitute products, facilities or services, shutdowns, slowdowns, or for other types of economic loss or for claims of a dealer's customers or any third party for such damages. °STELPRO specifically disclaims all consequential, incidental and contingent damages whatsoever.

This warranty does not cover any damages or failures resulting from: 1) a faulty installation or improper storage; 2) an abusive or abnormal use, lack of maintenance, improper maintenance (other than that prescribed by °STELPRO) or a use other than that for which the unit was designed; 3) a natural disaster or an event out of °STELPRO's control, including, but not limited to, hurricanes, tornadoes, earthquakes, terrorist attacks, wars, overvoltage, flooding, water damages, etc. This warranty does not cover any accidental or intentional losses or damages nor does it cover damages caused by negligence of the user or owner of the product. Moreover, it does not cover the cost of disconnection, transport, and installation.

The warranty is limited to the repair or the replacement of the unit or the refund of its purchase price, **at the discretion of "STELPRO**. Any parts replaced or repaired within the warranty period with the written authorization of "STELPRO will be warranted for the remainder of the original warranty period. This warranty will be considered null and void and "STELPRO will have the right to refuse any claims if **products have been altered** without the written authorization of "STELPRO and if the nameplate numbers have been removed or modified. This warranty does not cover scratches, dents, corrosion or discoloration caused by excessive heat, chemical cleaning products and abrasive agents. It does not cover any damage that occurred during the shipping.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages and some of them do not allow limitations on how long an implied warranty lasts, so these exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state or from province to province.

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