

# PRO SMOKER SMOKEHOUSES

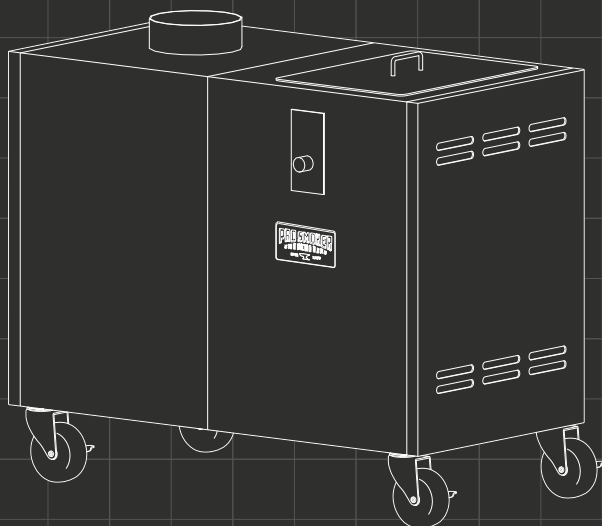
ESTD



1977

## PELLET SMOKE GENERATOR OWNER'S MANUAL

Model#: SG300



### ⚠ WARNING ⚠

Read Instruction Manual Before Attempting To  
Assemble or Operate this Product

# WELCOME TO THE PRO SMOKER FAMILY.

Congratulations on choosing Pro Smoker – we are thrilled to have you on board!

At Pro Smoker, your success is our priority. We are committed to supporting your craft with top-notch equipment and a dedicated team. Backed by three generations of expertise, Pro Smoker proudly manufactures high-quality, American-made smoker trusted by customers worldwide.

Whether you are experimenting with new flavors, perfecting your recipes, or expanding your business, we are here to assist you every step of the way.

Should you have any questions or need assistance, please do not hesitate to contact us at [info@pro-smoker.com](mailto:info@pro-smoker.com) or call 1-800-874-1949.

Your success is our success, and we cannot wait to see the amazing things you will create with your Pro Smoker!

Keep Smokin'

---

## Limitation of Liability

All technical information, data, and instructions regarding installation, operation, and maintenance were accurate at the time of printing. They have been compiled to the best of our knowledge, based on past experience and product testing.

No claims may be made based on the information, illustrations, or descriptions in this manual. The manufacturer accepts no liability for any damage or loss resulting from the following:

- Failure to fully follow the instructions in this manual
- Use of the unit for any purpose other than what is described
- Improper installation, including incorrect ventilation
- Unsafe, careless, or negligent operation
- Unauthorized repairs, modifications, or technical alterations
- Use of non-approved replacement parts

Modifying the pellet smoke generator in any way is not recommended and will void the warranty. All translations of this manual have been made to the best of our ability. The manufacturer is not liable for errors in translation, including those made by us or on our behalf.

**Important:** For best performance and maximum safety, all instructions in this manual must be followed. Any deviation from proper setup, use, or maintenance procedures will result in voided warranties. Responsibility for damage or injury caused by unsafe or improper operation lies entirely with the user.

---

## Intended Use

This pellet smoke generator is designed solely to produce smoke for use in properly ventilated smokehouses or smoke chambers. It is intended for the smoking of food products such as meat, poultry, fish, and other suitable items.

Any use beyond what is described in this manual, or for non-designated purposes, is considered improper and incompatible with the intended function of the device. This includes using the unit in open or unventilated environments, or attempting to adapt it for non-smoking applications.

Always operate the unit according to the procedures and safety standards outlined in this manual. Failure to do so may result in injury, equipment damage, or loss of warranty coverage.

### **WARNING**

Using the device improperly can be dangerous.

Always use it as intended and follow the instructions in this Operating Manual.

## Important Safety Information

- **Use Only Approved Pellets:** The Pro Smoker Pellet Generator is engineered to operate exclusively with Pro Smoker-approved pellets. Using unapproved pellets may cause performance issues, including temperature fluctuations or system errors.
- **Door Must Remain Closed:** Do not open the access door while the smoke generator is in operation.
- **Keep Hopper Lid Closed:** Always operate the unit with the hopper lid securely closed. Operating with the lid open may cause pellet discharge from the hopper under certain conditions.
- **No Volatile Liquids:** Never use liquid or volatile fire starters to ignite the smoke generator. Do not operate the unit if volatile liquids are present nearby. Doing so may cause an explosion and result in serious injury.
- **Keep Safe Distance:** Maintain adequate clearance from walls and all flammable materials or products. **Refer to your local fire codes** to determine the required clearance distances.
- **Alternate Smoker Wiring:** Refer to the interface wiring diagram at the back of this manual when connecting the generator to any smoker other than a Pro Smoker Smokehouse.

# TABLE OF CONTENTS

Intro / Limitation of Liability .....	2
Intended Use / Safety Information .....	3
Overview .....	5-6
Required Maintenance .....	7
Basic Operation .....	8
Controller .....	9-10
Wiring Diagrams / Fuse Locations .....	11-12
Parts .....	13
Limited Warranty .....	14

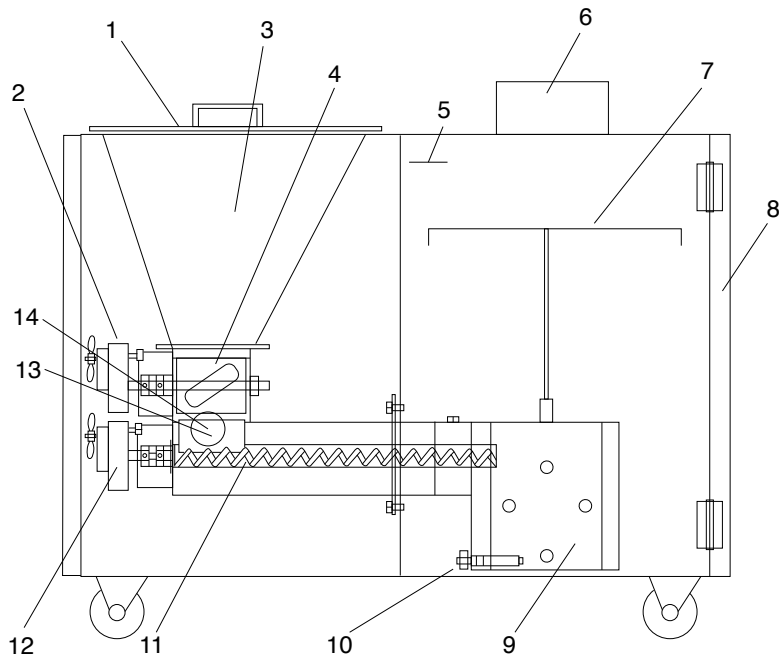


## Problems or Questions?

If you have questions during set up and start up, call Pro Smoker at 1-800-874-1949 (Hours of Operation: 8:00 am-4:30 pm CST) and ask for Support.

# YOUR PELLET SMOKE GENERATOR

## OVERVIEW



Item #	Description	Item #	Description
1	Hopper Lid	8	Access Door
2	Metering Cup Motor	9	Fire Pot
3	Pellet Hopper	10	Hot Rod Igniter
4	Meter Cup	11	Auger
5	2" RTD Probe	12	Auger Motor
6	6" Flue	13	High Limit Snap Disc
7	Flame Detection Shield	14	Combustion Fan

# YOUR PELLET SMOKE GENERATOR

# OVERVIEW



## RTD Probe Location

The RTD probe is located inside the burn chamber, positioned above the flame detection shield. Regularly clean ash and creosote buildup from the probe to maintain accurate temperature readings.

# YOUR PELLET SMOKE GENERATOR MAINTENANCE

Regular maintenance is essential to keep your pellet smoke generator operating safely and efficiently. Routine cleaning and inspection helps prevent buildup, maintain proper airflow, and extend the life of the unit. Follow the recommended maintenance procedures in this manual to maintain peak performance.

- **Hopper Seal Maintenance:** Ensure the hopper seal remains clean and in good condition.
- **Avoid Overfilling Hopper:** Do not overfill the hopper. Leave space to ensure proper pellet flow and prevent jams or performance issues.
- **RTD Probe Cleaning:** Regularly clean ash and creosote buildup from the RTD Probe to maintain accurate temperature readings. Use a non-metallic scrubbing pad for cleaning.
- **Cabinet Wall Cleaning:** Scrape creosote and ash buildup from the interior walls of the cabinet as needed. Regular cleaning helps maintain proper airflow and reduces fire risk.
- **Burn Pot Maintenance:** Clean the burn pot on a weekly basis to prevent ash buildup, ensure proper ignition, and maintain consistent performance.
- **Burn Cabinet Cleaning:** Regularly remove ash from the burn cabinet using a shop vacuum. Always allow the burn pot to cool for at least 12 hours before cleaning to ensure safe handling.
- **Electrical Cabinet Cleaning:** With the unit unplugged, regularly clean the electrical cabinet using a shop vacuum to prevent dust and debris buildup.
- **Smoke Pipe Maintenance:** Inspect and clean the smoke pipes leading to your smoker on a weekly basis. Regular maintenance ensures proper airflow and consistent smoke delivery.
- **Firebox Door and Gasket Inspection:** Regularly check the gaskets and ensure the firebox door is sealed tightly. A proper seal is essential for maintaining consistent temperature and smoke flow.

# YOUR PELLET SMOKE GENERATOR

## BASIC OPERATION

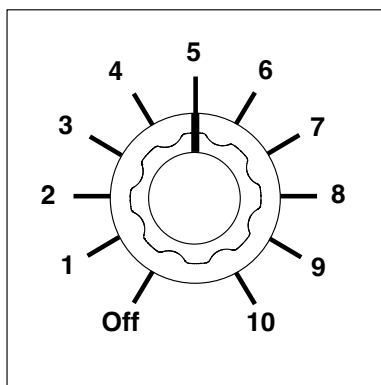
The following steps outline the basic operation of your Pro Smoker Pellet Smoker Generator. Always follow these procedures carefully to ensure safe use, consistent performance, and high-quality smoke output.

### Getting Started

1. Adjust the smoke damper to prevent smoke leakage. Keep it closed during normal operation, but open it slightly if smoke begins to escape from unintended areas.
2. Use only Pro Smoker-approved pellets to fill the hopper for optimal performance and reliability.
3. Plug the generator into a properly grounded 120-volt outlet or connect it to a microprocessor-controlled 120-volt circuit.

### Operating Instructions

1. Ensure sufficient fresh air supply for optimal performance.
2. Turn the controller dial to setting #5, which works best for most applications. Depending on your setup, settings of 4 or 6 may also provide efficient operation.
3. If the auger is empty, turn the generator on for 3 minutes to allow it to prime with pellets. Then restart the generator by turning the dial to the OFF position, and immediately back to setting 5.
4. The generator will begin operation with the LED flashing "ON."
5. Once the generator reaches 80°F during the startup sequence, it will heat up to a peak temperature of around 450°F before gradually cooling to a normal operating range of 120–220°F. Final temperature is influenced by factors such as oven fan speed, smoke pipe size and cleanliness, exhaust configuration, and room air pressure.



**Set Controller to 5 for Best Results**



# YOUR PELLET SMOKE GENERATOR CONTROLLER

## Switch Settings

### SW1 Switch - Auger Off Cycle Control

(located on the front of the controller)

The SW1 switch allows you to adjust the length of the auger's OFF cycle during operation. This setting determines how long the auger remains idle between feeding pellets into the burn pot.

### Available SW1 Settings (OFF Cycle Duration in Seconds):

- Off, 45, 55, 65, 75, 85, 95, 105, 115, 125, 135

Choose the appropriate setting based on your desired output and operating conditions.

## Low Limit Restart Condition

### If the temperature drops below 80°F:

- The generator enters the **Start Cycle**.

### After 5 minutes in the Start Cycle:

- **If the temperature reaches 80°F**, then the unit transitions into **Normal Operation**.
- **If the temperature does not reach 80°F**, the following occurs:
  - Auger turns **OFF**
  - Combustion fan turns **OFF**
  - Hot rod turns **OFF**
  - LED screen displays "**ErL**"
  - To clear the error: Set the **SW1 switch to OFF**, then restart the unit

## High Limit Error Condition

If the temperature rises above 615°F, the following occurs:

- Auger turns **OFF**
- Combustion fan turns **OFF**
- Hot rod turns **OFF**
- LED screen displays "**ErH**"
- **To clear the error:** Set the SW1 switch to **OFF**
- Restart unit once it has **cooled down completely**

## Start Cycle

Occurs at switch settings **1–10** after a power cycle or when moving the switch from the **OFF** setting, and lasts **6 minutes**.

### Auger Operation:

- **ON** for the first 2 minutes of Start Cycle
- **OFF** for the next 2 minutes
- **ON** for 30 seconds
- **OFF** for the final 1 minute 30 seconds

### Combustion Fan Operation:

- **ON** for the entire Start Cycle
- **ON** for the first 4 minutes
- **OFF** for the final 2 minutes

### Igniter/Hot Rod:

- **ON** during the full Start Cycle

### LED Screen Behavior:

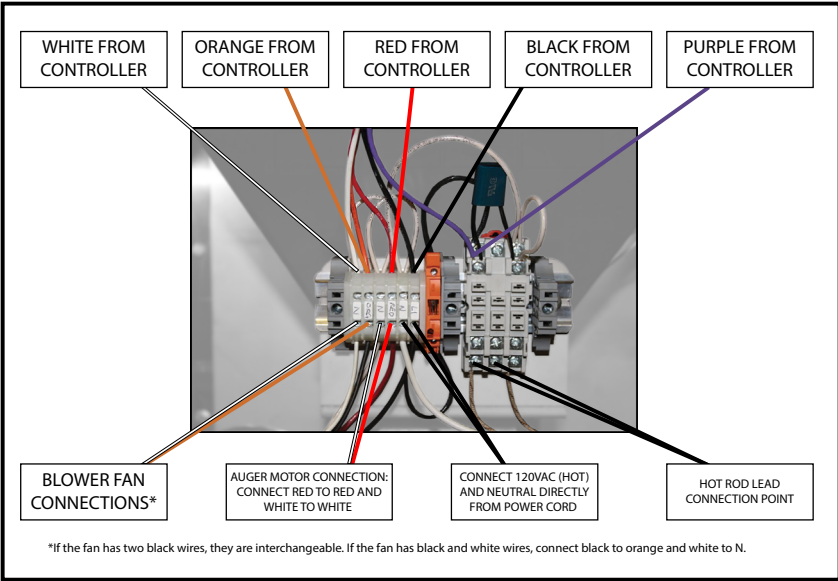
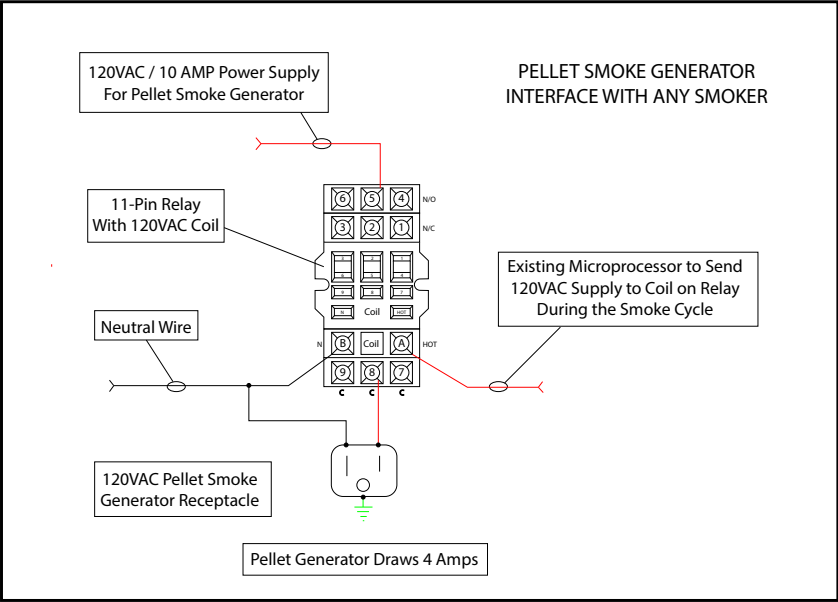
- Flashes “ON” once per second during the Start Cycle

## Temperature Behavior During the Start Cycle

- If the temperature is **150°F or higher** at the beginning of the Start Cycle:
  - The unit skips the Start Cycle and enters **Normal Operation**
- If the temperature **reaches 80°F before the 6-minute Start Cycle ends**:
  - The unit enters **Normal Operation**
- If the temperature **does not reach 80°F by the end of the 6-minute Start Cycle**:
  1. Auger turns **OFF**
  2. Combustion fan turns **OFF**
  3. Igniter/Hot Rod turns **OFF**
  4. LED screen displays “ErL”
  5. **To clear the error:** Move the switch to the **OFF** setting, then restart the unit after it fully cools

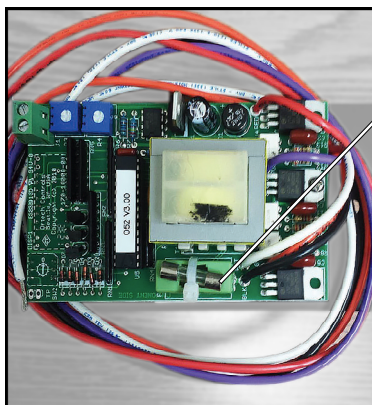
# ELECTRICAL

# WIRING DIAGRAMS

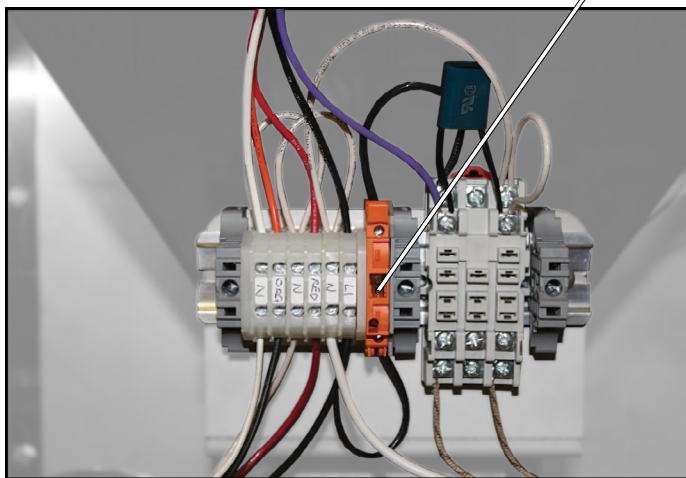


## ELECTRICAL

# FUSE LOCATIONS



3 AMP FUSE HOLDER  
WITH SPARE FUSE



7 AMP FUSE BLOCK WITH  
SPARE FUSE HOLDER

# PARTS & SERVICE

For replacement parts, visit [pro-smoker.com](http://pro-smoker.com) or contact Pro Smoker sales for assistance.

04-0107	Love Joy Rubber Spider
04-0114	1/2" Love Joy
04-0118	3/8" Love Joy
04-0166	3 AMP Fuse
04-0296-3	Controller
04-0325	Auger Motor
04-0327	Blower Motor
04-0328	Metering Cup Motor
04-0391	Ceramic Hot Rod
04-0603	Swivel/Locking Casters
04-298T	RTD Probe - 2"
05-0167	7 AMP Fuse
06-0192	Latch Catch
06-0354	Door Latch
06-0391	4" Smoke Gasket
07-0502	Hi Temp Gasket Kit

# LIMITED WARRANTY

Pro Smoker warrants to the original customer that the Pellet Smoke Generator Model SG300 is free from defects in material and workmanship when used as intended.

Pellet Smoke Generator Model SG300

- One-year limited warranty on the cabinet
- One-year warranty on electrical components (parts only)
- No warranty on paint, gaskets, or damage caused by corrosion

All warranties begin on the date of the final invoice to the dealer or the date of warranty registration, whichever is earlier. Pro Smoker's obligations shall be limited to repair, replacement, or refund and shall not include the cost of labor to diagnose, remove, or replace the defective part, or to transport the part and equipment to and from Pro Smoker.

This warranty does not apply to equipment or parts that have been repaired or altered by anyone other than Pro Smoker, or that, in Pro Smoker's judgment, have caused damage, been subjected to negligence, accident, damage from circumstances beyond Pro Smoker's control, improper operation, maintenance, or storage, or have been used in anything other than normal use or service.

This warranty does not apply to equipment or parts not manufactured by Pro Smoker; the original equipment manufacturer's warranty will apply.

The foregoing warranty is in lieu of any other warranty, expressed or implied, and Pro Smoker makes no warranty of merchantability of the equipment and parts or their fitness for a particular purpose.

Unless otherwise prohibited by law, the buyer's remedies are limited to this warranty, and all consequential and incidental damages are hereby excluded. Pro Smoker makes no warranty regarding the yield, quality, or characteristics of the buyer's product that may result from processing by the equipment sold. Pro Smoker will not be liable for personal injury or property damage, nor shall it have any obligation or liability for consequential damages, including but not limited to product loss and lost profits, even if advised of the possibility of such damages.

No person, including any agent or representative of Pro Smoker, is authorized to make any representation or warranty on its behalf unless made in writing by an officer of Pro Smoker.

Pro Smoker reserves the right to discontinue models at any time or to change specifications or designs without notice and without obligation.

[illegible]

# PRO SMOKER SMOKEHOUSES

ESTD  1977

1020 Western Dr. Hartford, WI 53027

**Hours of Operation:** 8:00 am-4:30 pm

**Phone:** 1-800-874-1949

**Email:** [info@pro-smoker.com](mailto:info@pro-smoker.com)

**WWW.PRO-SMOKER.COM**

*Smoke Like a Pro*   