

**BACKYARD
PRO®**

SQUARE PATIO HEATER

User Manual



- + Retain this manual for future reference.
- + Unit must be kept clear of combustibles at all times.

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CRITICAL INFORMATION

- **Safety is Paramount:** Always perform leak tests outdoors, follow all propane and electrical safety guidelines, and use the heater strictly in well-ventilated outdoor areas.
- **Proper Assembly and Maintenance:** Ensure all parts are present and correctly assembled using the provided tools; regular cleaning and annual inspections are essential to prevent hazards.
- **Lighting:** If lighting fails, please allow one minute for gas to dissipate before attempting again.
- **Outdoor Only:** This unit is designed and tested for outdoor use only. Using this heater indoors is a safety hazard.

OWNER'S INFORMATION

Please complete this information and retain this manual for the life of the equipment. For warranty purposes: please fill out and retain this information.

Model # _____

Serial # _____

Date of Purchase _____

Order # _____

HAZARD STATEMENTS

Read the Manual: Thoroughly read and understand the manual before setting up, operating, or cleaning the Commercial Electric Heater.

DANGER – Gas Leak Hazard

- **Hazard:** A gas leak can lead to fire, explosion, or poisoning if ignited.
 - If you smell gas, immediately shut off the gas supply, extinguish any open flame, and, if the odor persists, leave the area and call your gas supplier or fire department. Avoid attempting any self-repair or investigation of the leak.
- **Consequences:** Fire, explosion, or serious injury.

DANGER – Explosion and Fire Hazard

- **Hazard:** The heater can ignite combustible materials, creating a risk of explosion and fire.
 - Keep all combustibles materials (such as building materials, paper, or cardboard) and volatile substances (gasoline, solvents, paint thinner, dust, or unknown chemicals) at a safe distance as specified in the instructions.
 - Do not operate the heater in spaces where airborne combustibles might be present or accumulate.
 - Maintain minimum clearances of three (3) feet from the sides and two (2) feet from the top of the heater. Avoid environments with high dust content.
 - Avoid using the heater near areas where unapproved storage or handling of combustible materials might occur.
- **Consequences:** Fire, explosion, or severe property damage.

DANGER – Carbon Monoxide Hazard

- **Hazard:** Combustion produces carbon monoxide (CO), an odorless, colorless gas that can be lethal if inhaled in confined spaces.
 - Never block airflow into or out of the heater.
 - Use the heater only in well-ventilated outdoor areas and never indoors (e.g., in a home, camper, or tent).
 - Avoid relocating the heater to enclosed or poorly ventilated spaces, even temporarily.
- **Consequences:** Carbon monoxide poisoning, which can cause flu-like symptoms, severe health effects, or death.

DANGER – Propane Explosion and Fire Hazard

- **Hazard:** Improper storage or handling of propane can lead to explosion and fire.
 - Do not store propane near high heat, open flames, pilot lights, or direct sunlight, and keep ambient temperatures below 120°F (49°C).
 - Avoid areas where propane vapors can accumulate—if you smell gas, leave the area immediately.
 - Never install or remove a propane cylinder while the heater is lit, near an ignition source, or when the heater is hot.
 - Maintain a clearance of at least three (3) feet from the sides and two (2) feet from the top of the heater to keep flammable materials away.
 - Store propane cylinders outdoors in a well-ventilated area, out of reach of children, and never in enclosed spaces like a house or garage.
 - Avoid handling or relocating the cylinder when the heater is active or still hot.
- **Consequences:** Explosion, fire, severe injury, or property damage.

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WARNING – Flammable Vapor Hazard

- **Hazard:** Gasoline and other flammable vapors or liquids near the heater can ignite easily.
 - Do not store or use gasoline or flammable vapors/liquids near this or any other appliance, and do not store an LP-cylinder not in use near the heater. Avoid placing these substances where accidental contact with ignition sources might occur.
- **Consequences:** Fire, explosion, or severe injury.

WARNING – Outdoor Use and Proper Storage

- **Hazard:** Storing the heater indoors with an attached propane cylinder increases the risk of propane accumulation and fire.
 - When storing indoors, always disconnect the propane cylinder and store it outdoors in a well-ventilated area. Avoid leaving the cylinder connected to the heater in enclosed spaces.
- **Consequences:** Fire, explosion, or hazardous buildup of propane.

WARNING – Unforeseen Uses and Local Regulations

- **Hazard:** Unapproved or unforeseen uses of the heater can compromise safety.
 - Always consult your local fire safety authority and adhere to relevant codes (such as the National Fuel Gas Code, ANSI Z223.1, or CAN/CGA-B 149.2 in Canada) before using the heater. Avoid assuming the heater is safe for any use that has not been explicitly approved by the manufacturer or local standards.
- **Consequences:** Increased risk of fire, explosion, or injury, and non-compliance with safety regulations.

DANGER – Carbon Monoxide Hazard (Reiteration)

- **Hazard:** As a combustion appliance, this heater produces odorless carbon monoxide that can be deadly in confined spaces.
 - Never use the heater in enclosed areas such as campers, tents, or homes. Always ensure adequate ventilation. Avoid any operation that compromises airflow.
- **Consequences:** Carbon monoxide poisoning, which may result in severe illness or death.

WARNING – Improper Installation and Maintenance

- **Hazard:** Incorrect installation, adjustment, alteration, service, or maintenance can lead to property damage, injury, or death.
 - Read and follow all installation, operation, and maintenance instructions thoroughly.
 - Consult and comply with local codes and, if none exist, adhere to national standards.
 - Avoid DIY installation or maintenance without professional guidance.
- **Consequences:** Fire, explosion, property damage, or severe injury.

WARNING – California Proposition 65

- **Hazard:** Combustion by-products from using this product contain chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.
 - Ensure proper ventilation and strictly follow usage guidelines to minimize exposure. Avoid using the heater in areas where exposure to these chemicals could be inadvertently increased.
- **Consequences:** Increased long-term health risks.

WARNING – Burn Hazard

- **Hazard:** The heater remains extremely hot during operation, posing a risk of burns.
 - Never leave the heater unattended while it is in use or still hot.
 - Keep the heater out of reach of children and untrained users.
 - Avoid allowing children or others to approach the heater during or immediately after use.
- **Consequences:** Severe burns or injuries.

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WARNING – Propane Gas Hazard

- **Hazard:** Propane gas is invisible, odorless (after the odorant fades), and highly flammable.
 - Use only propane gas systems designed for vapor withdrawal and in accordance with local ordinances, codes, and ANSI/NFPA 58.
 - Turn off propane when not in use, and do not rely solely on smell for leak detection.
 - Avoid storing heat-sensitive or combustible items under the heater where radiant heat could cause damage.
- **Consequences:** Fire, explosion, or damage to property.

CAUTION – Service Safety

- **Hazard:** Poor maintenance or improper servicing can lead to gas leaks, fire, or equipment malfunction.
 - Keep all connections and fittings—including the propane cylinder valve outlet—clean and free of debris.
 - Check all connections for leaks using soapy water during setup and maintenance. Never use an open flame to check for leaks.
 - Use the appliance only as a heating device and do not modify it in any way.
 - Avoid neglecting routine inspections or attempting repairs without proper expertise.
- **Consequences:** Increased risk of gas leaks, fire, or malfunction.

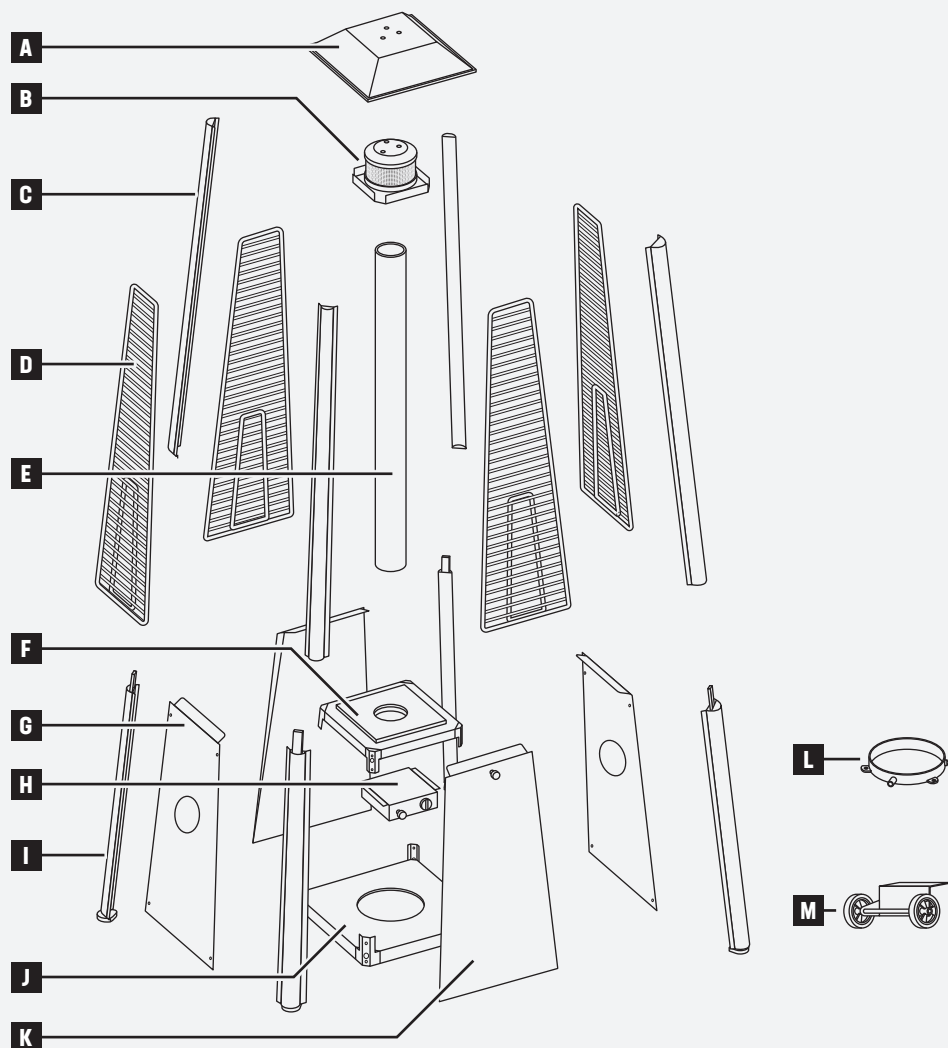
CAUTION – Burn and Service Hazard

- **Hazard:** High surface temperatures and improper service can cause burns, property damage, or fire.
 - Alert all users about the high-temperature surfaces and keep a safe distance to avoid burns or igniting clothing.
 - Supervise young children closely when near the heater.
 - Do not hang clothing or other flammable materials on or near the heater.
 - Reinstall any protective guards removed for servicing before returning the heater to use.
 - Ensure installation, repair, and regular inspections are performed by qualified service personnel.
 - Avoid unsupervised or self-service operations by untrained individuals.
- **Consequences:** Minor to moderate injuries, property damage, or fire hazards.

INITIAL SETUP

- **Inspect the Packaging:** Examine the patio heater’s packaging for any signs of damage that may have occurred during shipping.
- **Unboxing:** Open the packaging with care. Use scissors or a box cutter to cut open the box, ensuring you do not damage the heater or its components.
- **Remove All Components:** Remove the Heater and all parts from the box.
- **Placement:** Ensure a minimum clearance of 50” on all sides of the heater to ensure proper airflow. Place the heater on a stable surface.

ASSEMBLY INSTRUCTIONS


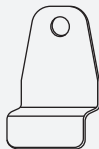
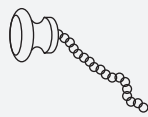







PARTS LIST

Components:

A	Reflector	1
B	Damper	1
C	Upper Support	4
D	Wire Guard	4
E	Glass Tube	1
F	Middle Plate	1
G	Side Panel	3
H	Control Box	1
I	Lower Support	4
J	Base	1
K	Front Panel	1
L	Stability Ring	1
M	Casters	1

HARDWARE

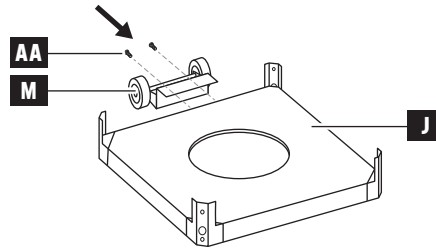
AA M3 x 16 Screws QTY: 1 PACK 	BB Fixing Brackets QTY: 4 	CC Control Knob QTY: 1 	DD Battery (AA) QTY: 1 *NOT INCLUDED 
EE O-Ring QTY: 1 	FF Wing Nuts QTY: 3 	GG Flat Washers QTY: 6 	HH Double-Sided Screws QTY: 3 

ASSEMBLY INSTRUCTIONS

Step 1

Attach Wheels to Base

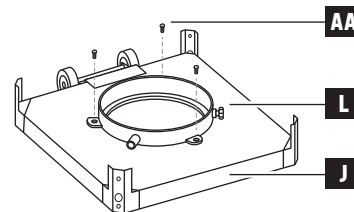
1. Secure the casters (M) to the base (J) by using two of the included M3x16 screws (AA).



Step 2

Attach Stability Ring

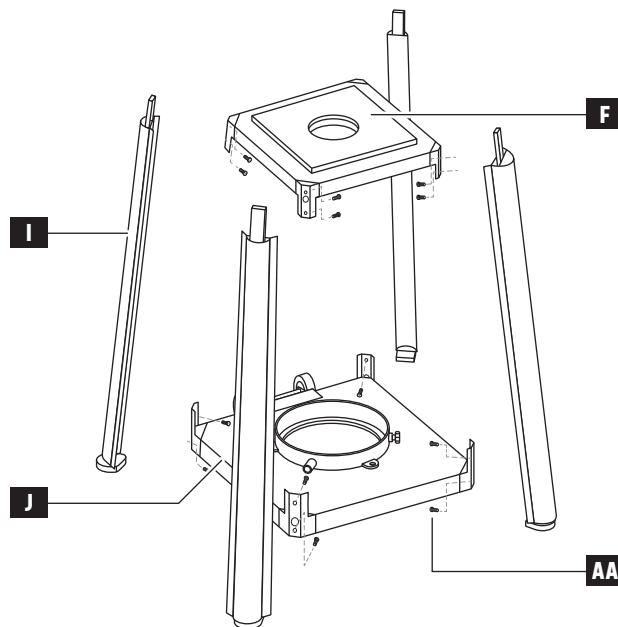
1. Fasten the stability ring (L) to the base (J) by using the M3x16 screws (AA).



Step 3

Assemble Lower Supports

1. Unscrew any pre-installed M3x16 screws (AA).
1. Attach the four lower supports (I) to the base (J) and middle plate (F) using the M3x16 screws (AA).

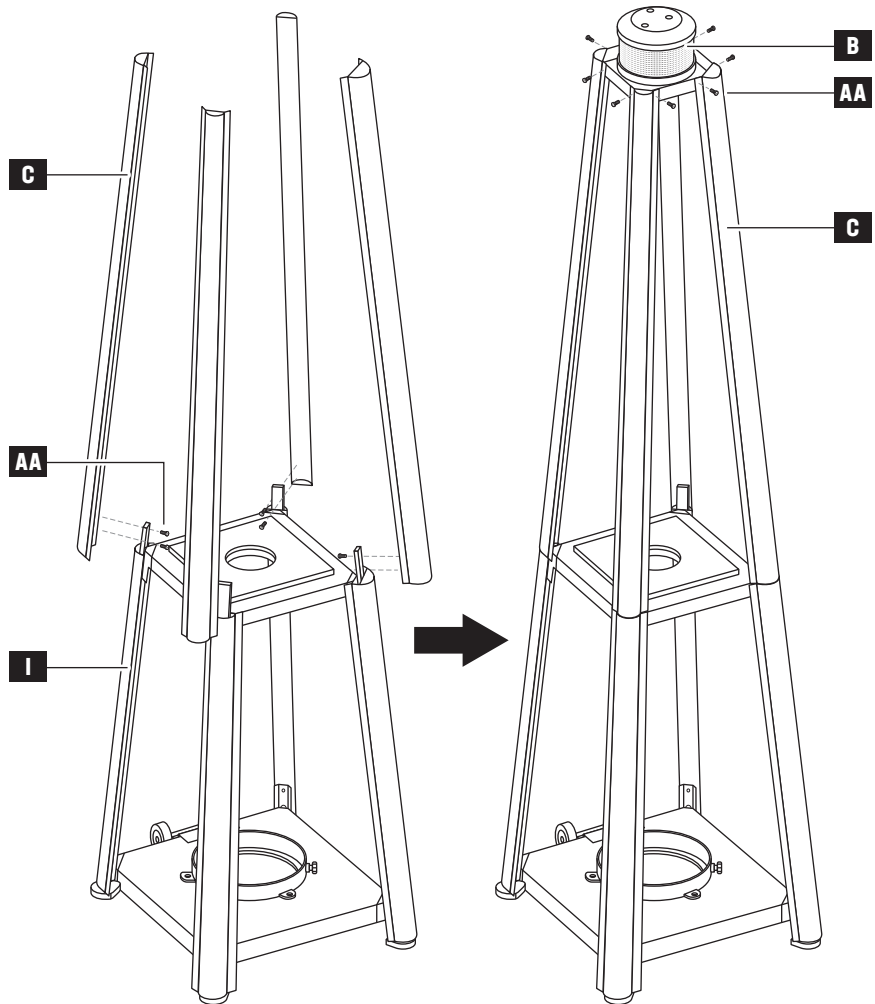


ASSEMBLY INSTRUCTIONS

Step 4

Assemble Upper Supports and Damper

1. Unscrew any pre-installed M3x16 screws (AA).
2. Attach the four upper supports (C) to the lower supports (I) using the M3x16 screws (AA).
3. Fasten the damper (B) to the upper supports (C) using the M3x16 screws (AA).

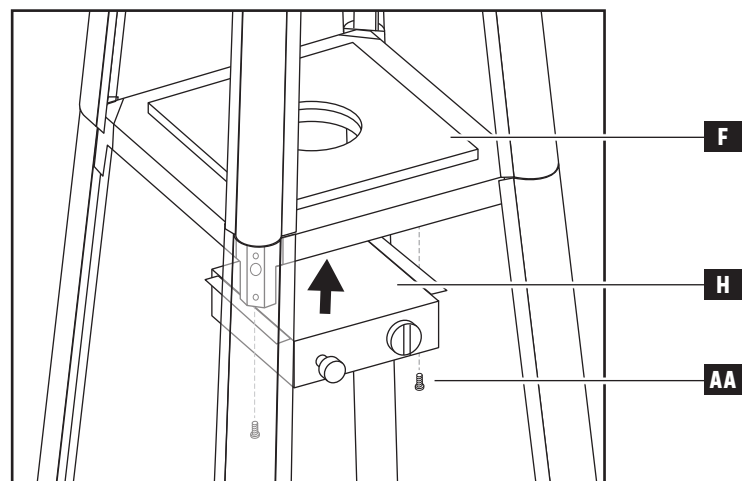


Step 5

Install Control Box

1. Unscrew the pre-installed M3x16 screws (AA) from the bottom of the middle plate (F).
2. Insert a AA battery (DD) into the control box (H). AA battery sold separately.
3. Secure the control box (K) to the bottom of the middle plate (F) with the M3x16 screws (AA).

NOTE: Ensure the control knob faces the front of the heater, where the magnet is installed in the middle plate.

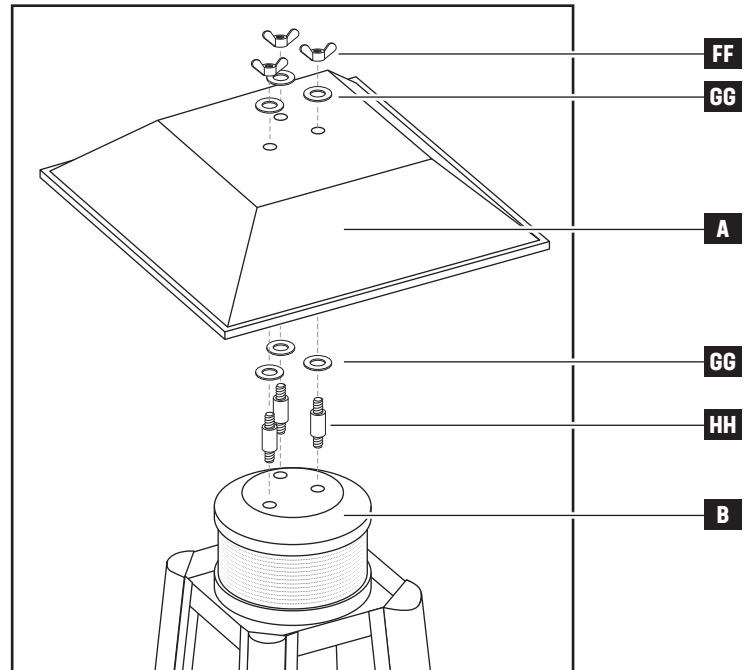


ASSEMBLY INSTRUCTIONS

Step 6

Assemble Reflector

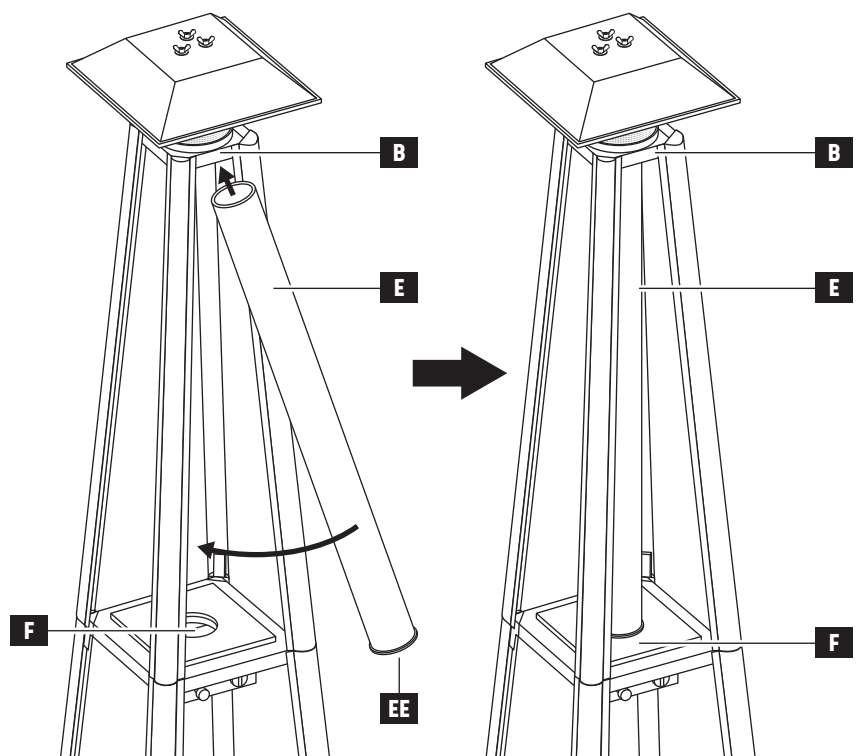
1. Using the provided double-sided screws (HH), flat washers (GG), and wing nuts (FF), attach the reflector (A) into the damper (B).



Step 7

Install Glass Tube

1. Carefully lift and insert the glass tube (E) through the center hole of the damper (B).
2. Confirm that the rubber O-ring (EE) is attached to the lower edge of the glass tube (E) as illustrated.
3. Slide the glass tube (E) through the hole on the middle plate (F) as shown.
4. Check that the glass tube (E) is properly positioned and completely covers the center hole of the middle plate (F).

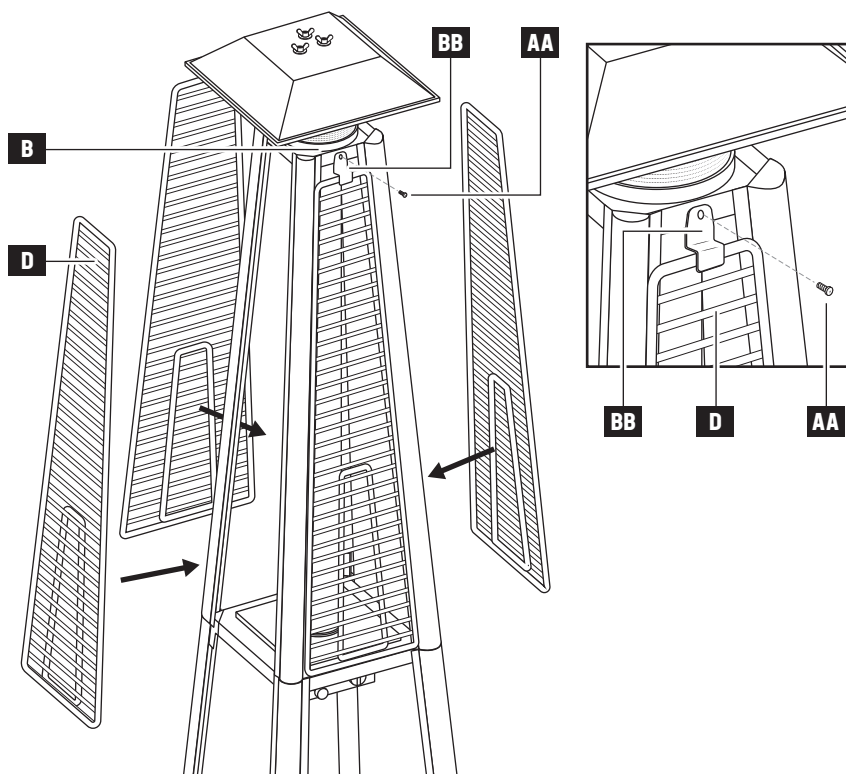


ASSEMBLY INSTRUCTIONS

Step 8

Attach Wire Guards

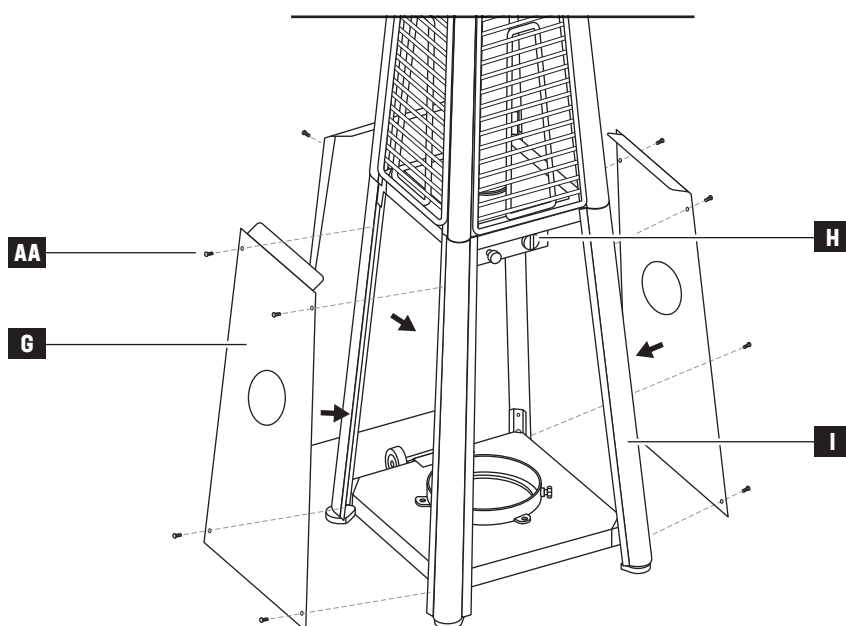
1. Insert the hooks of the wire guards (D) into the corresponding holes on the frame, ensuring all hooks engage.
2. Unscrew the four screws from the damper (B).
3. Using the M3x16 screws (AA), fasten the fixing brackets (BB) over the top of the guards as shown.
4. Repeat until all guards are installed.



Step 9

Attach Side Panels

1. Secure the three side panels (G) to the heater using the M3x16 screws (AA).
NOTE: Use one M3x16 screw (AA) from Step 3 that was unscrewed from the lower supports (I).
2. DO NOT cover the front side where the control knob of the control box (H) is located.



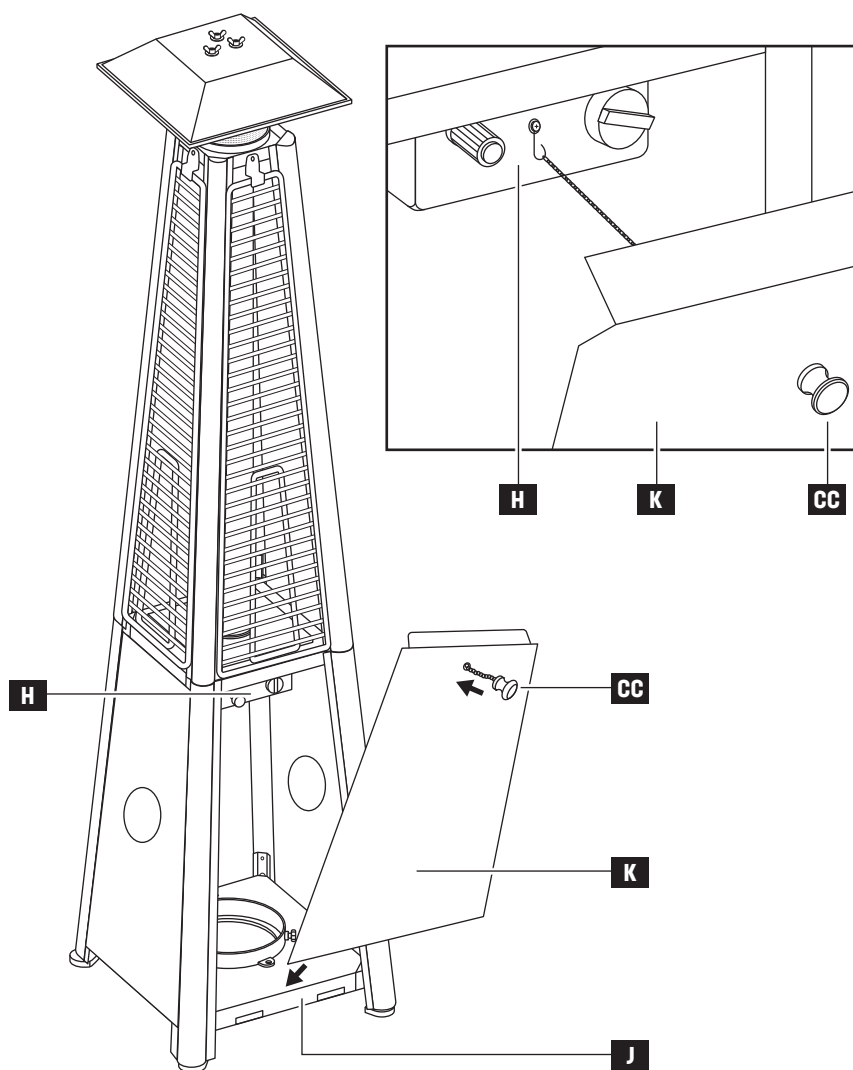
ASSEMBLY INSTRUCTIONS

Step 10

Attach Front Panel and Knob

1. Screw the control knob (CC) onto the front panel (K).
2. Attach the front panel (K) to the heater by inserting its two tabs into the slots on the base (J).
3. Hook the preassembled chain on the front panel (K) into the hole at the front of the control box (H).

NOTE: The chain secures the panel, preventing it from falling forward during lighting or operation.



OPERATION

Installation of Tank

Step 1: Gas Cylinder Requirement:

- **Provide Propane Gas and Cylinder:**
 - Use a standard 20 lb. propane cylinder only.
 - Ensure the Heater is used only with a propane vapor withdrawal supply system.
- **Standards Compliance:**
 - Refer to the Standard for Storage and Handling of Liquefied Petroleum Gas, ANSI/NFPA 58 for detailed information.
- **Supply Pressure:**
 - Maximum supply pressure: 250 PSI.
 - Minimum supply pressure: 25 PSI (for input adjustment for propane gas).
- **Use of Regulator and Hose Assembly:**
 - Use the pressure regulator and hose assembly supplied with the appliance.
 - Replacement regulators and hose assemblies must be specified by the appliance manufacturer.

Safety Warnings for Propane Cylinder

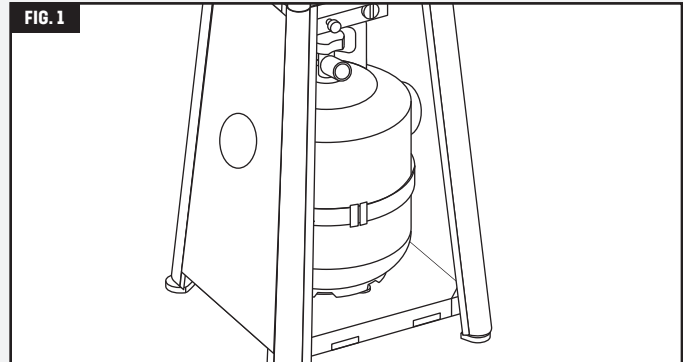
- **Inspect the Cylinder:**
 - Do not use a dented, rusted, or damaged propane cylinder. Have it checked by your cylinder supplier.
 - Never use a propane cylinder with a damaged valve connection.
- **Cylinder Construction:**
 - The propane cylinder must comply with U.S. Department of Transportation (DOT) specifications or CAN/CSA-B339 standards for LP gas cylinders.
 - Ensure the cylinder includes a collar to protect the valve.
- **Overfilling Prevention Device:**
 - Use a cylinder provided with a listed overfilling prevention device.
 - Ensure the cylinder connection device is compatible with the appliance connection.
- **Avoid Unregulated Connection:** Never connect an unregulated propane cylinder to the Heater.

Cylinder Handling and Storage

- **Storage Restrictions:**
 - Do not store a spare LP gas cylinder under or near the appliance.
 - Store the cylinder outdoors in a well-ventilated area, out of reach of children.
 - A disconnected cylinder must have dust caps tightly installed and must not be stored in a building, garage, or any other enclosed area.
- **Filling Restrictions:** Never fill the cylinder beyond 80% full.
- **Dust Cap Usage:**
 - Place the dust cap on the cylinder valve outlet whenever the cylinder is not in use.
 - Only install the type of dust cap provided with the cylinder valve. Using other types of caps or plugs may result in propane leakage.

Step 2: Install Cylinder on the Base (Fig. 1)

- **Place the Gas Cylinder:** Position the gas cylinder inside the base of the Heater.
- **Secure Cylinder Location Brackets:** Attach the cylinder location brackets to the base to secure the gas cylinder.
- **Buckle the Gas Cylinder:**
 - Use the belt to buckle the gas cylinder, adjusting the length as needed to ensure a secure fit.

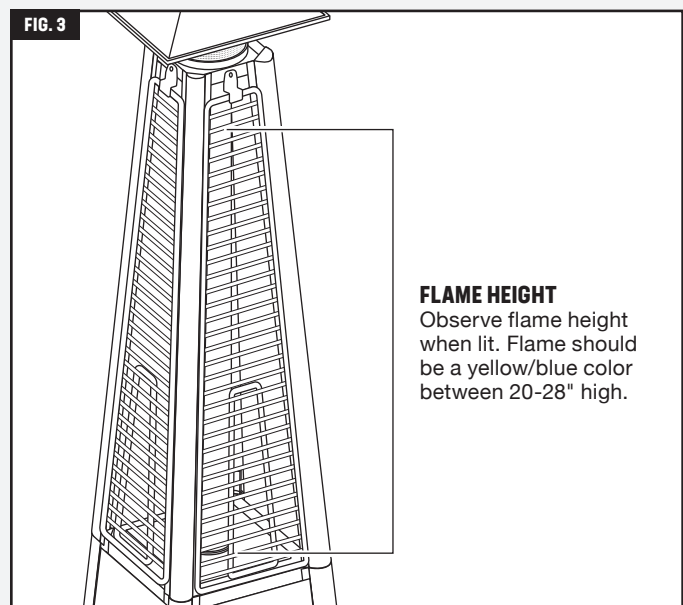
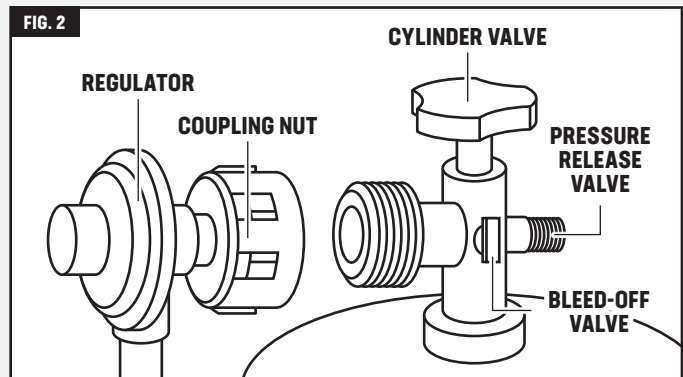


Step 3: Connect the Regulator to the Gas Cylinder Valve (Fig. 2)

If you smell gas, immediately close the tank and disconnect from the regulator. Allow 5 minutes for gas to disperse before trying again.

If after the second attempt gas is detected, please try a different tank. If this does not fix the issues, stop using the heater immediately and reach out to customer service.

- **Close the Gas Supply:** Turn the cylinder valve clockwise to close the gas supply on the gas cylinder.
- **Attach the Regulator Coupling:**
 - Screw the regulator coupling clockwise by hand only to the gas cylinder valve.
 - Ensure the regulator is fastened securely.
- **Connection Device:** The cylinder connection device is a CGA No. 791 connection.
- **Ignition Instructions:**
 1. **Turn on the Propane Tank Valve:** Open the valve on the propane tank to allow gas flow.
 2. **Ignite the Heater:** Press and hold the control knob in the pilot position. Use the igniter button to light the pilot. After the pilot is lit, continue holding the control knob for 30 seconds, then release.
 3. **Adjust the Heat Setting:** Turn the control knob to the desired heat setting.
- **Adjust Flame Settings:** Adjust the flame to the desired setting using the control knob. Monitor the flame to ensure it operates safely and consistently (Fig. 3).
- **Shut Down Instructions:**
 1. **Turn Off the Heater:** Turn the control knob to the OFF position.
 2. **Close the Propane Tank Valve:** Close the valve on the propane tank to stop the gas flow.



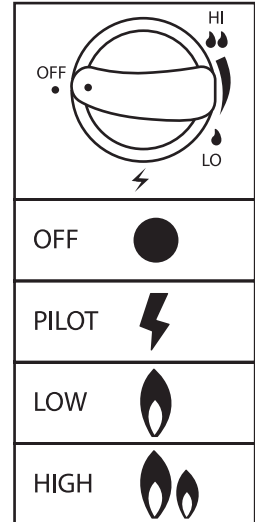
Lighting Instructions

(FIG. 4)

WARNING: If lighting steps are not followed exactly, a fire or explosion may result, causing property damage, personal injury, or loss of life.

1. **Battery Check:** Ensure a AA battery (not included) is inside the ignition chamber and has power. The anode (+) should face outward.
2. **Control Knob and Gas Valve:** Ensure the control knob is OFF, then slowly open the gas cylinder valve.
3. **Ignite the Pilot:**
 - Press and turn the control knob to the PILOT position and hold it for one minute.
 - Push the igniter to generate a spark while keeping the control knob depressed.
 - Check for a pilot flame through the glass tube.
4. **If Pilot Does Not Light:** If the pilot does not light, turn the control knob to the OFF position, wait two minutes, and try again from Step 2. Several attempts may be necessary.
5. **If Pilot Lights:** If the pilot lights, keep the control knob pressed for an additional 30 seconds, then turn the control knob to LOW.
6. **Adjust Heat Setting:** For maximum heat, turn the control knob to HIGH.
7. **Turn Off the Heater:**
 - To turn off the heater, turn the control knob to OFF.
 - Close the valve of the gas cylinder or the regulator after use.

FIG. 4



CLEANING AND MAINTENANCE

- **Regular Maintenance:**
 - Keep exterior surfaces clean.
 - Use warm, soapy water for cleaning. Never use flammable, corrosive, or abrasive cleaners.
- **Burner and Pilot Assembly:** Ensure the area around the burner and pilot assembly remains dry. If the gas control is exposed to water, do not use it; it must be replaced.
- **Inspection After Long Break:**
 - Inspect the unit for spiders, spider webs, or other insects after a long period of non-use.
 - Ensure airflow is unobstructed. Keep controls, burner, and circulating air passageways clean.
- **Signs of Blockage:**
 - Heater does not reach the desired temperature.
 - Heater makes popping noises.
 - Spiders and insects can nest in the burner or orifices, creating a dangerous condition that can damage the Heater and render it unsafe.
- **Cleaning Burner Holes:**
 - Clean burner holes with a heavy-duty pipe cleaner.
 - Use compressed air to clear away smaller particles.
- **Carbon Deposits:** Carbon deposits can create a fire hazard. Clean the reflector and glass tube inside with soapy water if any carbon deposits develop. Always be careful when cleaning the glass tube.
- **Appliance Area:**
 - Keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.
 - Do not obstruct the flow of combustion and ventilation air. Keep the ventilation openings of the cylinder enclosure free from debris.
 - Clean the appliance, including special surfaces, with recommended cleaning agents as necessary.

STORAGE

- **Between Uses:**
 1. **Turn Off the Heater:** Turn the control knob to the OFF position.
 2. **Turn Off the LPG Cylinder:** Turn the LPG cylinder valve to the OFF position.
 3. **Store the Heater Upright:** Store the Heater upright in an area sheltered away from weather conditions such as rain, sleet, hail, snow, and wind.
 4. **Cover the Heater (Optional):** If desired, cover the Heater to protect exterior surfaces and to help prevent dust and debris from collecting in air passages.
- **During Periods of Extended Inactivity or When Transporting:**
 1. **Turn Off the Heater:** Turn the control knob to the OFF position.
 2. **Disconnect the LPG Cylinder:** Disconnect the LPG cylinder and move it to a secure, well-ventilated location outdoors.
 3. **Avoid Excessive Temperatures:** Do not store the Heater in a location where temperatures will exceed 120°F (49°C).
 4. **Store the Heater Upright:** Store the Heater upright in an area sheltered away from weather conditions such as rain, sleet, hail, snow, and wind.
 5. **Cover the Heater (Optional):** If desired, cover the Heater to protect exterior surfaces and to help prevent dust and debris from collecting in air passages.

TROUBLESHOOTING

PROBLEM	ISSUE	REMEDY
Pilot will not light.	Cylinder valve is closed.	Open valve.
	Blockage in orifice or pilot tube.	Clean or replace orifice or pilot tube.
	Air in gas line.	Open gas line and bleed it (pressing control knob in) for not more than 1-2 minutes or until you smell gas.
	Low gas pressure with cylinder valve fully open.	Turn cylinder valve OFF and replace cylinder.
	Igniter fails.	Use match to light pilot; obtain new igniter and replace.
Pilot will not stay lit.	Dirt built up around pilot.	Clean dirt from around pilot.
	Connection between gas valve and pilot assembly is loose.	Tighten connection and perform leak check.
	Thermocouple is not operating correctly.	Replace thermocouple.
Burner will not light.	Propane cylinder is frosted over.	Wait until the propane cylinder warms up and becomes unfrosted.
	Blockage in orifice.	Clear blockage.
	Control knob is not in ON position.	Turn control knob to ON.
Burner flame is low.	Gas pressure is low.	Turn cylinder valve OFF and replace cylinder.
	Outdoor temperature is less than 40°F and tank is less than 1/4 full.	Use a full cylinder.
	Control knob fully ON.	Check burner and orifices for blockage.
Carbon build-up.	Dirt or film on reflector and burner screen.	Clean reflector and burner screen.
	Blockage in burner.	Remove blockage and clean burner inside and outside.