



H-150

CONSTRUCTION HEATER



OPERATING INSTRUCTIONS MANUAL

PLEASE RETAIN THIS DOCUMENT FOR FUTURE REFERENCE

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GENERAL HAZARD WARNING

FAILURE TO COMPLY WITH THE PRECAUTIONS AND INSTRUCTIONS PROVIDED WITH THIS HEATER CAN RESULT IN SERIOUS DEATH, SERIOUS BODILY INJURY, AND PROPERTY LOSS OR DAMAGE FROM HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND / OR ELECTRICAL SHOCK. ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER. IF YOU NEED ASSISTANCE OR HEATER INFORMATION SUCH AS AN INSTRUCTIONS MANUAL, LABEL, ETC., CONTACT THE MANUFACTURER.

WARNING

FIRE, BURN, INHALATION, AND EXPLOSION HAZARD. KEEP SOLID COMBUSTIBLES, SUCH AS BUILDING MATERIALS, PAPER, OR CARDBOARD A SAFE DISTANCE AWAY FROM THE HEATER AS RECOMMENDED BY THE INSTRUCTIONS. NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNER, DUST PARTICLES, OR UNKNOWN CHEMICALS.

WARNING

NOT FOR HOME OR RECREATIONAL VEHICLE USE

WARNING

KEEP SOLID COMBUSTIBLES, SUCH AS BUILDING MATERIALS, PAPER, OR CARDBOARD A SAFE DISTANCE AWAY FROM THE HEATER AS RECOMMENDED BY THE INSTRUCTIONS. NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNER, DUST PARTICLES, OR UNKNOWN CHEMICALS.

TESTING AGENCY

This heater is designed and approved for use as a construction heater in accordance with the Standard for Gas Fired Construction Heaters ANSI Z83.7 • CSA 2.14.

CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE ANY QUESTIONS ABOUT APPLICATIONS.

Other standards govern the use of fuel gases and heat producing products in specific applications. Your local authority can advise you about these.

The intended use of this heater is for the temporary heating of a building or structure under construction, alteration, or repair.

WARNING

AIR QUALITY HAZARD

- Heaters are to be installed and operated in accordance with CGA Standard B149.1 Installation Code and to any provincial or local codes
- Do not use this heater for heating human living quarters
- Use of direct-fired heaters in the construction environment can result in exposure to levels of CO, CO₂, NO₂ which are considered to be hazardous to health and potentially life threatening
- Do not use in unventilated areas
- Know the signs of CO and CO₂ poisoning: Headaches, stinging eyes, dizziness, disorientation, difficulty breathing, feeling of being suffocated
- Proper ventilation air exchange (OSHA 29 CFR 1926.57) to support combustion and maintain acceptable air quality shall be provided in accordance with OSHA 29 CFR 1926.154, ANSI A10.10 Requirements for Temporary and Portable Space Heating Devices and Equipment used in the Construction Industry or the Natural Gas and Propane Installation Codes CSA B149.1
- Periodically monitor levels of CO, CO₂, NO₂ existing at the construction site; minimum: at the start of the shift and every 4 hours thereafter
- Provide ventilation air exchange, either natural or mechanical, as required to maintain acceptable indoor air quality, ensuring that the ventilation cannot become obstructed, and adjusting for proper ventilation as the project progresses
- Pipe Fittings: When any pipe fittings are loosened, tightened, or replaced, an approved thread sealing compound should be applied to the threads to ensure that they are leak proof and pressure tight
- Flare Fittings: Thread sealing compound is not required on SAE flare fittings
- Post-Service Leak Checks: The entire valve train should be checked for leaks using a soapy water solution or an approved leak detector solution whenever the heater is serviced
- Installation & Maintenance: Heaters are to be installed and operated in accordance with CGA Standard B149.1 Installation Code and to any provincial or local codes. Service should only be carried out by a qualified propane gas fitter
- Placement: The heater should only be fired on a level surface. Minimum clearances (see Technical Specifications section) should always be respected
- Combustibles: Do not store or use flammable products (gases, liquids, or solids) within the vicinity of the heater. Minimum clearances (see Technical Specifications section) should always be respected

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SAFE USE & OPERATION

1. Clear a space for the H-150 Construction Heater to safely operate on that meets the following requirements:
 - Minimum clearances (refer to the Instruction Plate on the unit or to the **Technical Specifications** section)
 - Flat, level, non-combustible surface
 - Adequate airflow / ventilation to prevent the heater from creating an unhealthy breathing atmosphere
2. Light the burner, being careful not to burn yourself
3. Set the regulator pressure:
 - Turn the regulator valve clockwise to increase pressure to a maximum of 20 PSIG (150,000 BTUH); reference Ratings Plate on the unit
 - Turn the regulator valve counter-clockwise to decrease pressure to a minimum of 2.25 PSIG (50,000 BTUH); reference Ratings Plate on the unit

ASSEMBLY

1. Set the regulator pressure to minimum; fully counter-clockwise
2. Ensure that the valve on the fuel source tank is fully closed; fully counter-clockwise
3. Firmly affix the fuel input coupler to the fuel source tank; hand-tighten only

MAINTENANCE

Service should only be carried out by a qualified propane gas fitter.

For further maintenance information, reach out to your local vendor.

TROUBLESHOOTING

BURNER FAILS TO IGNITE

- Ensure that there is adequate propane by a) opening the propane cylinder valve slowly and checking for high pressure, or b) by gauging the weight of the cylinder and its fuel
- Ensure that the regulator is fully secured (turn clockwise)
- Attempt to light the burner by pressing and holding the reset button for 45 seconds
- Referring to the system schematic, disconnect the copper line from the low fire orifice. When you press the reset button, gas should pass through the line. If there is no flow, or if it's minimal, there could be a blockage in one of the components
- With the low fire line is disconnected, remove the low fire orifice and carefully clean it with a drill bit (#72 DMS, 0.635 mm, 0.025 in)
- If there is a blockage in the main orifice, the pilot burner will not ignite. Carefully clean it with a drill bit (#54 DMS, 1.397 mm, 0.055 in)

TROUBLESHOOTING (CONT)

MAIN BURNER FAILS TO FIRE CORRECTLY

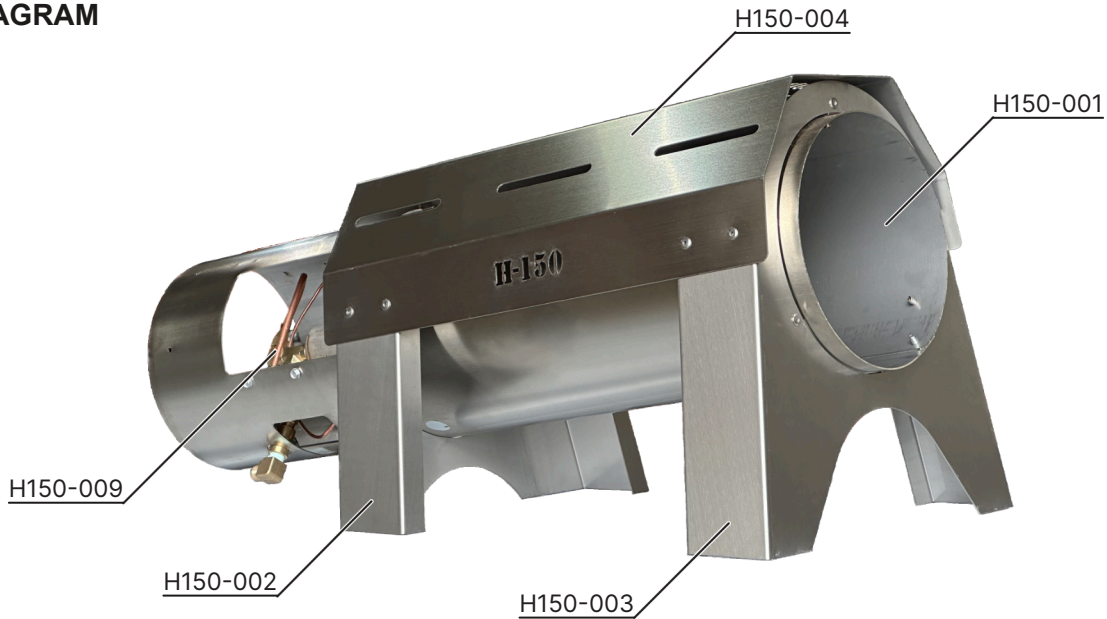
- To light the pilot burner, press and hold the reset button for 45 seconds. When released, the small flame should change to a larger flame. If this does not happen, or if the flame is yellow, remove the main orifice and carefully clean it with a drill bit (#54 DMS, 1.397 mm, 0.055 in)
- Ensure that the reset button is releasing correctly. If it is not, replace the safety valve

BURNER FAILS TO REMAIN LIT

- Replace the thermocouple
- Replace the safety valve

SPARE PARTS

PARTS DIAGRAM



PART NUMBER	PART DESCRIPTION
H150-001	BARREL
H150-002	REAR LEG
H150-003	FRONT LEG
H150-004	COVER
H150-005	BURNER BRACKET
H150-006	HEAT SHIELD
H150-007	MOUNTING BRACKET
H150-008	BURNER HEAD
H150-009	SAFETY VALVE KIT
H150-010	THERMOCOUPLE
H150-011	0 - 20 PSI REG
H150-012	25' 3/8"x3/8" HOSE SWIVEL ENDS
H150-013	1/4" MPT x 3/8" SAE

TECHNICAL SPECIFICATIONS

Model	H-150
Fuel	Propane gas
Input	Min 50,000 BTUH Max 150,000 BTUH
Manifold Pressure	2.25 to 20 PSIG
Standard Hose Length	25 ft 7.6 m
Regulator With POL	Preset to 20 PSIG (Max)
Approval(s)	ANSI Z83.7 • CSA 2.14 (2017)
Weight	19.5 lbs 8.9 kg
Dimensions	30 x 11.25 x 14 in 76 x 29 x 36 cm
Air Outlet Diameter	8 in 20 cm
Fuel Consumption / Hr	2.3 to 6.9 lbs 1.0 to 3.1 kg
Ignition Type	Manual

CLEARANCE FROM COMBUSTIBLES

Above	8 ft 2.5 m
Front	10 ft 3.0 m
Sides	4 ft 1.3 m