

Blackheat™ GH

Gas-Fired, Overhead Infrared Tube Heater for Residential Garages and Light Industrial /Commercial Applications

Use and Care Manual

FOR YOUR SAFETY

If you smell gas:

1. Open windows.
2. **DO NOT** try to light any appliance.
3. **DO NOT** use electrical switches.
4. **DO NOT** use any telephone in your building.
5. Leave the building.
6. Immediately call your local gas supplier after leaving the building. Follow the gas supplier's instructions.
7. If you cannot reach your gas supplier, call the Fire Department.

⚠ WARNING



Fire Hazard

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

Failure to follow these instructions can result in death, injury or property damage.

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⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can result in death, injury or property damage. Read the installation, operation and service manual thoroughly before installing or servicing this equipment.

Installation must be done by a contractor qualified in the installation and service of gas-fired heating equipment or your gas supplier.

Installer

Please take the time to read and understand these instructions prior to any installation. Installer must give a copy of this manual to the owner.

Owner

Keep this manual in a safe place to provide your serviceman with information should it become necessary.



Quality in Any Language™

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A Note from Roberts-Gordon

Thank you for purchasing a Roberts-Gordon heating product. We are pleased you have chosen the CGTH Series overhead tube heater. In addition to the quality you receive from our company, you also receive over 30 years of infrared heating experience.

For years of trouble-free operation from your heater, carefully read this Use & Care Manual. This Manual contains valuable information to help you use the heater safely and properly.

To obtain warranty service, please complete and mail the Owner Warranty Registration Card immediately. In addition to activating your warranty, registering your heater enables us to contact you with safety and product updates.

Keep this manual in a safe place in case you have any questions or require service in the future. Also, since proof of purchase is required to obtain warranty coverage, keep the original sales receipt in a safe place. Remember to record the model and serial numbers of your heater below. Model and serial numbers are found on the rating tag affixed to the heater. See page 14 for rating tag location.

Model Number:	Serial Number:	Fuel:	Date of Installation:
Installed By: Name		Purchased From (If different than Installer): Name	
Company		Company	
Address		Address	
Phone		Phone	
Fax		Fax	

If you have questions or need assistance, please contact Roberts-Gordon at the following:

United States

1250 William Street
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(Eastern time)

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**Your safety
is important
to us**



This symbol is used throughout the manual to notify you of possible fire, electrical or burn hazards. Please pay special attention when reading and following the warnings in these sections.

WARNING

Failure to follow these instructions can result in death, injury or property damage.

- Do not store or use flammable objects, liquids or vapors in the vicinity of the heater or any other appliance. See page 13.
- WHAT TO DO IF YOU SMELL GAS:
 - Do not try to operate heater.
 - Do not touch any electric switch; do not use any phone in your home or building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.

WARNING

Failure to follow these instructions can result in death, injury or property damage.

- Read this manual carefully before using the heater.
- Plug the heater into a grounded three-prong ceiling outlet. See page 17.
- Do not install or service any part of the heater. Installation, Service and Annual Inspection must be done by a licensed gas fitter or contractor.
- Installer must exhaust heater outside. See page 18.
- Keep all persons, especially children, away from the heater. See page 15.
- Keep the heater out of the weather. The heater is for indoor areas such as residential garages, workshops, hobby greenhouses, small warehouses, service centers or lobbies. Do not use the heater in living or sleeping areas such as a bedroom or basement.

CAUTION

Failure to follow these instructions can result in property damage.

Do not use heater in an area containing corrosive chemicals. The use of these chemicals should be avoided to ensure a longer life of the burner, tubing and other parts. See page 20.

About the Company

Headquartered in Buffalo, New York, USA, Roberts-Gordon is an international manufacturer of low-intensity and high-intensity gas-fired infrared heaters. Since 1962, our products have heated thousands of commercial and industrial applications from airplane hangars to manufacturing facilities to retail outlets.

We've taken our vast experience and knowledge from all of the big jobs and created an efficient, economical heater for the small jobs - the CGTH Series. For hard-to-heat areas like those found in residential garages and light industrial buildings, infrared heat provides the ideal alternative for warmth and comfort.

About the Heater

The CGTH Series is a factory-assembled, gas-fired, low-intensity heating system that incorporates a balanced flue. The system has been designed for easy installation and will provide years of economical operation and trouble-free service. Not only is infrared heat efficient, it also provides the most comfortable conditions in open areas, such as garages.

Gas-Fired means it uses clean-burning Natural or LP gas.

Low-Intensity means that the radiant surface of the heat exchanger tube does not glow red. Instead, it operates at a temperature of less than 1000°F and radiates energy at a lower intensity per square foot of radiating surface. The lower temperature and intensity levels are within a range that is most effective in establishing and maintaining personal comfort levels. An aluminum reflector directs the radiant energy downward, bathing people and objects below in warmth.

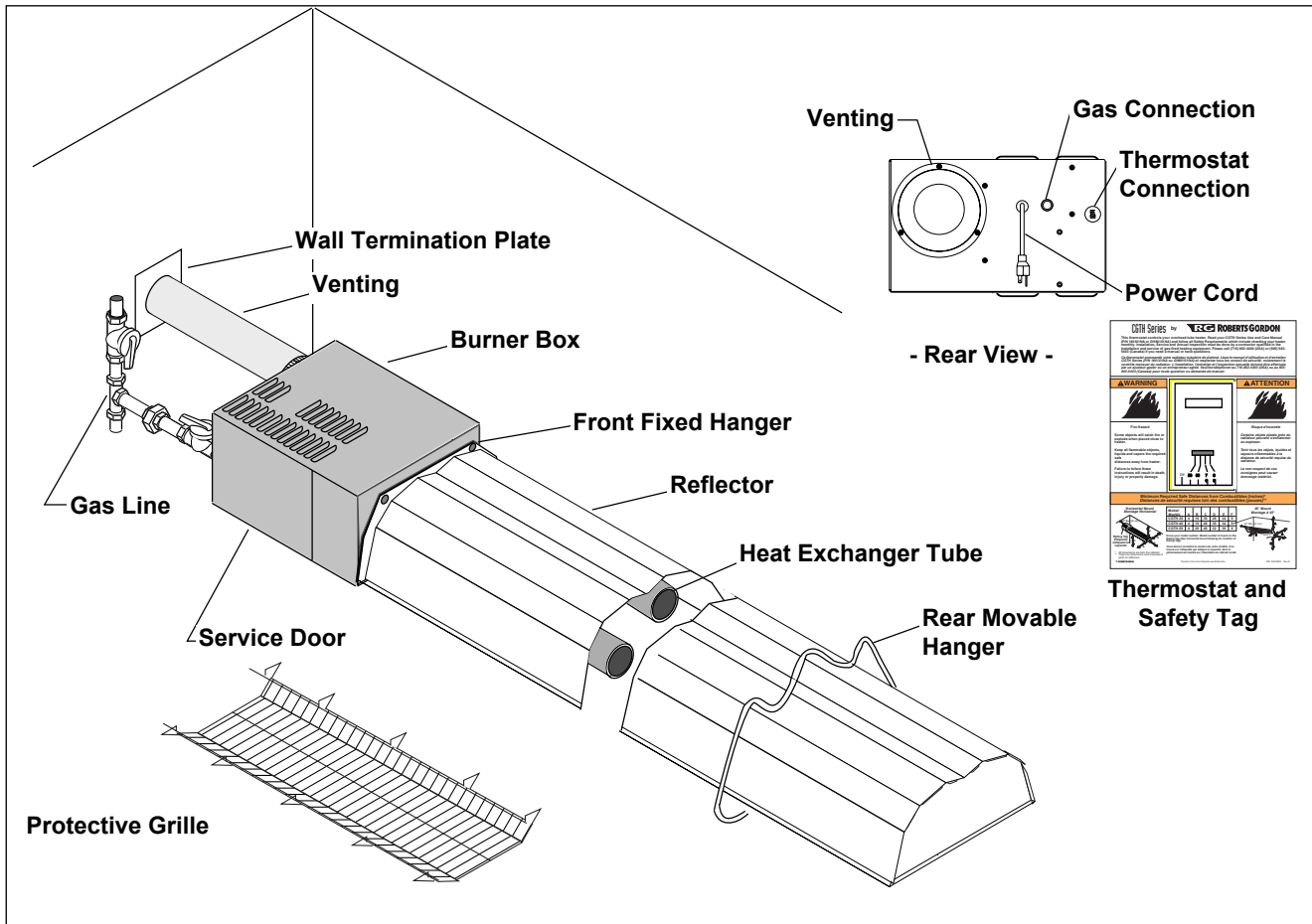
Balanced Flue means that the burner draws combustion air from outdoors and exhausts harmful emissions to the outdoors through the same opening.

Radiant refers to the energy radiated by the CGTH Series heater. Because the energy is in the form of infrared rays, it does not directly heat the air. Instead, the rays heat objects such as the floor, cars, machines and people. The warm objects, in turn, heat the air.

These combined features are the key to the exceptional comfort and fuel efficiency provided by the CGTH Series heater.

Introduction

CGTH SERIES HEATER



<u>Burner Box</u>	Contains the electrical components and gas distribution components that make the heater work. There are no owner-serviceable items in this box.
<u>Front Fixed Hanger</u>	Provides rigid support and mounting surface for the reflector.
<u>Reflector</u>	Made from formed aluminum and reflects the radiant energy downward, bathing people and objects below.
<u>Heat Exchanger Tube</u>	U-shaped tube through which the heated air and products of combustion pass.
<u>Rear Movable Hanger</u>	Provides support for the heat exchanger and reflector at the end that is furthest from the burner box. The support may be moved (within limits) to accommodate hanging of the unit. See page 16 for limits.
<u>Service Door</u>	Used only by a licensed contractor for access to the electrical and gas distribution components.
<u>Gas Line</u>	Must only be installed and serviced by a licensed contractor or gas fitter.
<u>Wall Termination Plate</u>	Placed on the outside wall over the venting.
<u>Venting</u>	Installer must properly exhaust the heater outside. The 5" outer duct carries fresh air to the burner. The 3" inner duct carries the products of combustion to the outside.
<u>Thermostat</u>	24 Volt Thermostat mounted with Safety Tag.
<u>Power Cord</u>	Three-prong plug that must be connected to a dedicated and properly grounded three-prong ceiling outlet.
<u>Protective Grille</u>	Included with select models. See page 15 for details.



WARNING

Installation, Service and Annual Inspection must be done by a contractor qualified in the installation and service of gas-fired heating equipment.

Failure to follow these instructions can result in death, injury or property damage.

Roberts-Gordon wants you, the owner, to be aware of the Installer's Responsibility as stated in the Installation Manual. The Installer's Responsibility is:

- To install the heater, as well as the gas and electrical supplies, in accordance with applicable specifications and codes. Roberts-Gordon recommends installer contact local building inspectors or Fire Marshals for guidance.
- To use the information in the manual together with the cited codes and regulations to perform the installation.
- To install the heater in accordance with the Minimum Required Safe Distances from Combustibles.
- To exhaust the heater outside.
- To furnish all needed materials not furnished as standard equipment.
- To see that the materials and installation methods used result in a job that is workmanlike in appearance and is in compliance with all applicable codes and requirements of the Installation Manual.
- To give the Use and Care Manual as well as the Installation Manual to the owner.

The following information is included in the Installation Manual and applies to the installer at the time of installation. The warnings are included on the product. Because your safety is important to us, we include these warnings for your information. If you find your heater is not installed according to these warnings and codes, immediately contact the installer.

System Requirements

This section provides the following information:

- Defines the gas, electric and venting requirements for the CGTH Series heater.
- Specifies the national standards and applicable codes that apply to the gas, electric and venting requirements.
- Specifies the national standards and applicable codes that apply to non-residential installations.

Gas Service

System Requirements

Inlet Connection

Connection: 3/8" Male NPT

Inlet Pressure

Natural Gas:

Minimum - Inlet 5.0" w.c.

Maximum - Inlet 14.0" w.c.

LP Gas (propane):

Minimum - Inlet 11.0" w.c.

Maximum - Inlet 14.0" w.c.

Manifold Pressure

Natural Gas: 3.5" w.c.

LP Gas (propane): 10.5" w.c.

Type of Gas

The type of gas appearing on the nameplate must be the type of gas used. Installation must comply with local codes and recommendations of the local gas company. **United States:** Refer to National Fuel Gas Code, ANSI Z223.1 - latest revision, (same as NFPA Bulletin 54). **Canada:** Refer to Can 1-B149.1 and B149.2: Installation Codes for Gas Burning Appliances.

Gas Supply Lines

The size of the gas supply lines must comply with local codes and recommendations of the local gas company. **United States:** Refer to National Fuel Gas Code, ANSI Z223.1 - latest revision, (same as NFPA Bulletin 54). **Canada:** Refer to Can 1-B149.1 and B149.2: Installation Codes for Gas Burning Appliances.

A 1/8" NPT plugged tap must be installed in the gas line connection immediately upstream of the burner that is farthest from the gas supply meter. The tap is required for checking system gas pressure.

Meter and Service

Meter and service must be large enough to handle all the heaters being installed plus any other connected load. The gas line which feeds the system must be large enough to supply the required gas with a maximum pressure drop of 1/2" w.c. When gas piping is not included in the layout drawing, the local gas supplier will usually help in planning the gas piping.

Before Using the Heater



CGTH SERIES HEATER

Electrical Service

System Requirements

The CGTH Series heater requires a grounded three-prong electrical outlet to be installed within 18 inches of the rear surface of the heater's burner box. It is recommended that the outlet for the heater be ceiling-mounted and should be on a dedicated circuit. **DO NOT** use an electrical extension cord to operate the heater.

Heater Rating: 120 VAC, 60 Hz, Single Phase, 1 Amp

⚠ ATTENTION		⚠ WARNING	
<p>Risque d'électrocution</p> <p>Brancher le cordon du radiateur sur un socle à 3 broches et à la masse, situé au plafond.</p> <p>Ne pas sectionner ou retirer la broche de masse de cette prise.</p> <p>N'utiliser aucun câble de rallonge.</p> <p>Le non-respect de ces consignes peut entraîner mort ou électrocution.</p>			<p>Electrical Shock Hazard</p> <p>Plug heater into grounded three-prong ceiling receptacle.</p> <p>Do not cut or remove the grounding prong from this plug.</p> <p>Do not use with an extension cord.</p> <p>Failure to follow these instructions will result in death or electrical shock.</p> <p><small>Printed in the U.S.A P/N 91037500 Rev. A</small></p>

Grounding

The heater must be electrically grounded in accordance with the following codes: **United States:** Refer to National Electrical Code, ANSI/NFPA-70 - latest revision. Wiring must conform to the most current National Electrical Code and local ordinances. **Canada:** Refer to Canadian Electrical Code, CSA C22.1 Part 1 - latest revision.

Thermostat

It is important to note that the CGTH Series heater is controlled by a low voltage (24 VAC) thermostat supplied with the heater. The Direct Spark Ignition (DSI) module located inside the burner box supplies the necessary electrical power to operate the thermostat. No other electrical power to the thermostat is required.

Before Using the Heater


Venting

System Requirements

The CGTH Series Heater must be installed with the venting system supplied, or with one of the optional venting kits available from Roberts-Gordon. **DO NOT** connect this heater to a separate chimney, and **DO NOT** common vent with any other fuel burning appliance.

The CGTH Series Heater employs a balanced flue/air venting duct system and must conform to the following length requirements:

- Maximum Length:** 10 feet
- Minimum Length:** 2 feet - 6 inches

⚠ WARNING		⚠ ATTENTION
<p>Carbon Monoxide Hazard Heater must be exhausted outside. Use materials supplied. Failure to follow these instructions will result in death or injury.</p> <p><small>© ROBERTS-GORDON</small></p>		<p>Risque de monoxyde de carbone L'échappement du radiateur doit s'effectuer à l'extérieur. Utilisez le matériel fourni. Le non-respect de ces consignes peut entraîner mort ou blessures.</p> <p><small>Printed in the U.S.A. P/N 91037300 Rev. B</small></p>

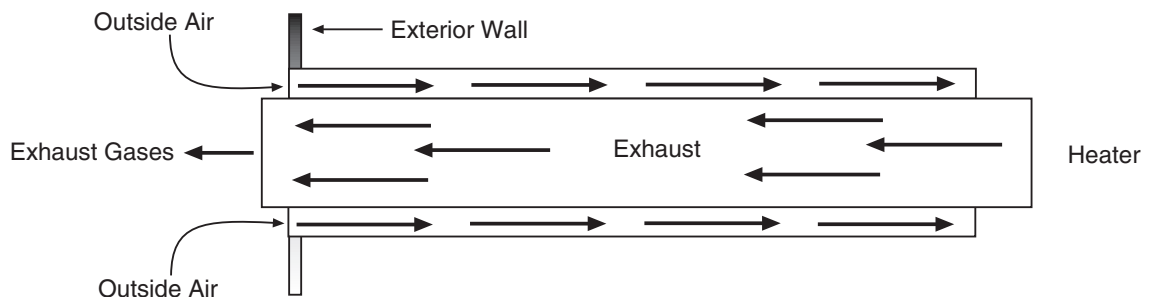
Venting Codes

The location, size, installation and termination of vents, as well as the minimum required safe distances when penetrating combustible walls, must comply with local codes and recommendations of the local gas company. **United States:** Refer to National Fuel Gas Code, ANSI Z223.1 - latest revision, (same as NFPA Bulletin 54). **Canada:** Refer to Can 1-B149.1 and B149.2: Installation Codes for Gas Burning Appliances.

Balanced Flue Construction

The balanced flue consists of a 3" diameter flue which is concentrically positioned inside a 5" diameter vent pipe (see below). The 5" diameter vent supplies outside air that is necessary for combustion while the 3" diameter flue carries the products of combustion from the heater, and exhausts them outside.

The balanced flue is applicable for both horizontal and vertical venting arrangements. Vertical venting will require the optional roof venting kit available from Roberts-Gordon.



Non-residential Installations:

Aircraft Hangars

The CGTH Series heater may be used in certain areas of aircraft hangars. Installation in aircraft hangars must be in accordance with the following codes: **United States:** Refer to Standard for Aircraft Hangars, ANSI/NFPA-409 - latest revision. **Canada:** Refer to Standard CGA B149-1-M91 and B149.2.

- Heaters in aircraft storage or service areas must be installed a minimum of 10 feet above the upper surface of wings or engine enclosures of the highest aircraft which may be housed in the hangar. (This should be measured from the bottom of the heater to the top of the wing, or engine enclosure, whichever is highest from the floor).
- In other sections of aircraft hangars, such as shops or offices, heaters must be installed a minimum of 8 feet above the floor.
- Heaters installed in aircraft hangars shall be located so as not to be subject to damage by aircraft, cranes, movable scaffolding or other objects.
- When installed over hoists, the minimum required safe distances to combustibles must be maintained from the uppermost point of the combustible materials placed on the hoist.

Public Garages

The CGTH Series heater may be used in public garages. Installation in public garages must be in accordance with the following codes: **United States:** Standard for Parking Structures NFPA-88A - latest revision or the Standard for Repair Garages, NFPA-88B - latest revision. **Canada:** Refer to Can 1-B149.1 and B149.2: Installation Codes for Gas Burning Appliances.

- Heaters must be installed a minimum of 8 feet above the floor. Minimum required safe distances to combustibles must be maintained from vehicles parked below the heater.
- When installed over hoists, the minimum required safe distances to combustibles must be maintained from the uppermost point of the combustible materials placed on the hoist.

Hazardous Locations

Where there is the possibility of exposure to combustible airborne material or vapor, consult the local Fire Marshal, the Fire Insurance Carrier or other authorities for approval of the proposed installation.

Before Using the Heater

It is the Installer's Responsibility to choose a suitable mounting location for the heater. The Installer must follow the guidelines below as stated in the Installation Manual. Before using your heater, check the location. If the location does not follow these guidelines, do not use the heater. Immediately contact your installer.

Heater Location

1. The heater must meet the minimum mounting height requirement of 7 feet above the floor. *For aircraft hangars and public garages, the heater must meet the minimum mounting height requirement of 8 feet above the floor.* See page 10.
2. The heater location allows for the required safe distances from combustibles (*combustibles include vehicles, wood, gasoline and flammable objects, liquids and vapors*).
3. The location of the heater will not restrict motion of passageway doors or windows.
4. The location will not interfere with operation of the overhead garage door.
5. The location will provide the best coverage of the total area to be heated.
6. Consideration be given to the types of vehicles that will be parked in the garage (cars, vans, boats, RV's, etc.).
7. The location will allow for the required safe distances from combustibles with respect to the vehicles parked in the garage.
8. The location will allow the required utilities (i.e.: gas and electric) and venting to be installed (maximum vent length is 10 feet).
9. Sufficient clearances will exist to allow for maintenance.
10. Overhead structural members (rafters, beams, etc.) are accessible for attaching the heater.

Required Safe Distances From Combustibles

Once your heater is installed by a licensed contractor, you must remember to maintain the required safe distances from combustibles at all times. Combustibles are materials which may catch on fire and include many common items such as your vehicle, wood and wood shavings, paper, rubber, fabric, plastic - just to name a few. Don't forget these materials could be in the form of liquids and vapors and may be airborne, as well.


Combustible materials such as those noted, and any other combustible materials must not be placed closer to any side of the CGTH Series heater than the distances noted in the diagrams on the following pages. If you have any questions about the required safe distances from combustibles, or the associated diagrams, please contact your installer, Roberts-Gordon representative or distributor, or Roberts-Gordon during normal business hours which are Monday through Friday, 8:15 a.m. to 4:45 p.m., Eastern Time.

In USA : (716) 852-4400

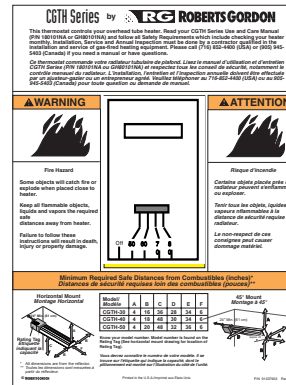
In Canada: (905) 945-5403

It is important to keep the required safe distances from combustibles at all times to avoid death, personal injury or property damage. Clearances from vehicles parked beneath heaters must be maintained. Signs should be posted to identify any possible violation of the clearance distances from the heater in the vehicle areas. Maximum allowable stacking height in storage areas should be identified with signs or appropriate markings. The illustrations and Table on page 14 specify the minimum required safe distances from combustibles.

Important Safety Instructions

 WARNING	<p>Failure to follow these instructions can result in death, injury or property damage.</p>
<ul style="list-style-type: none"> Do not store or use flammable objects, liquids or vapors in the vicinity of the heater or any other appliance. Do not hang any objects from or place any objects on the heater. Keep the minimum required safe distances from vehicles parked beneath the heater. 	<ul style="list-style-type: none"> Post signs or appropriate marking to identify any possible violation of the minimum required safe distances. Post signs or appropriate markings to identify maximum allowable stacking height in storage areas.

The warnings on this page appear on the heater and are also on the thermostat tag (shown right) to serve as a constant reminder to maintain the required safe distances from combustibles at all times. If you do not have either the label on your heater or the thermostat tag, immediately call your installer or Roberts-Gordon for replacement.





CGTH Series by **RG ROBERTS-GORDON**

WARNING

ATTENTION

Minimum Required Safe Distances from Combustibles (Inches) Distance de sécurité requises des objets combustibles (pouces)	Model	A	C	D	E	F
CGTH-10	10	18	24	24	24	24
CGTH-15	15	24	30	30	30	30
CGTH-20	20	30	36	36	36	36

Thermostat Tag

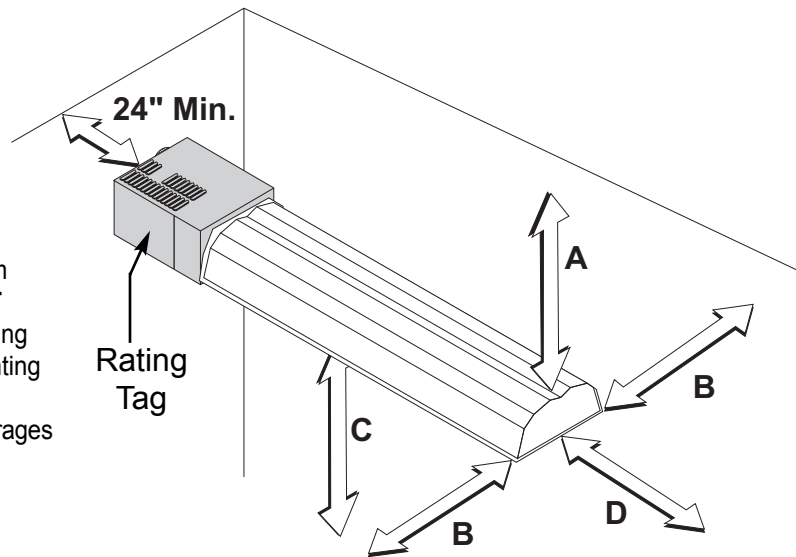
 WARNING

<p>Fire Hazard</p>
<p>Some objects can catch fire or explode when placed close to heater.</p> <p>Keep all flammable objects, liquids and vapors the required safe distances away from heater.</p> <p>Failure to follow these instructions can result in death, injury or property damage.</p>

Using the Heater

Your heater may be installed in one of three ways: horizontal, 45° tilt left or 45° tilt right. Since the distances for the tilt installation are the same, the chart only shows one (the 45° tilt left). To determine the minimum required safe distances for your heater, you must know the mounting type and model number of your heater.

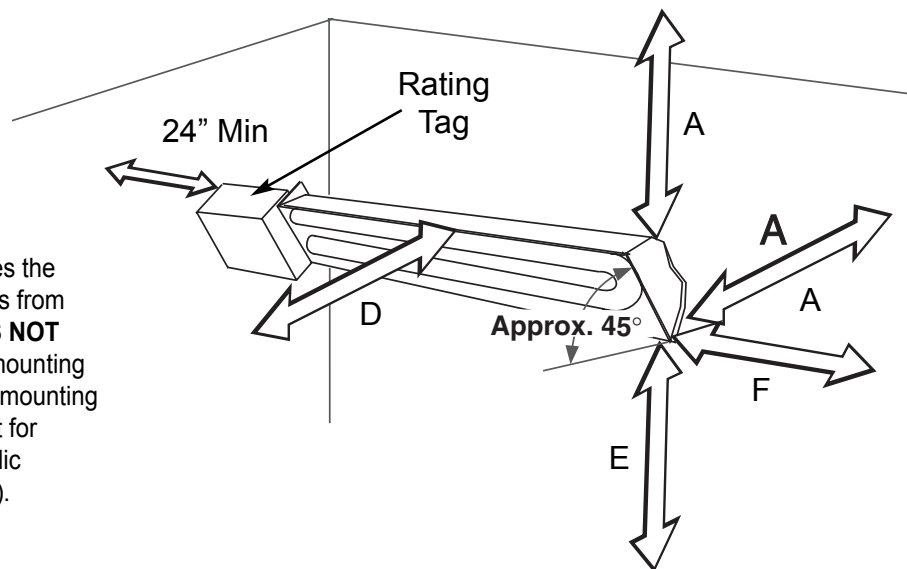
Horizontal Installations

NOTE: Dimension "C" indicates the required safe distances from combustibles, it **DOES NOT** indicate the required mounting height. The minimum mounting height is 7 feet, except for aircraft hangars & public garages (see page 10).



45° Tilted Installations

NOTE: Dimension "E" indicates the required safe distances from combustibles, it **DOES NOT** indicate the required mounting height. The minimum mounting height is 7 feet, except for aircraft hangars & public garages (see page 10).



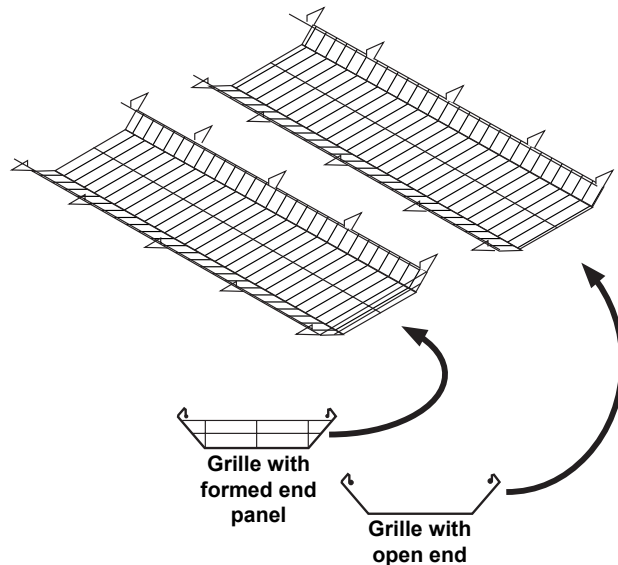
MINIMUM REQUIRED SAFE DISTANCES							
Model	BTU/Hr	A	B	C	D	E	F
CGTH-30	30,000	4"	16"	36"	28"	34"	6"
CGTH-40	40,000	4"	18"	48"	30"	34"	6"
CGTH-50	50,000	4"	20"	48"	32"	36"	6"


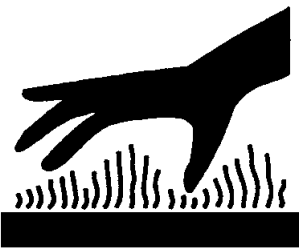
Protective Grille

Roberts-Gordon recommends using the protective grille at all times. The grille is included with select models of the CGTH Series heater and is supplied in sections that must be installed on the underside of the reflector prior to operation. The shorter length (8 feet) heater requires installation of two protective grille sections, while the longer heater (11 feet-6 inches) requires three protective grille sections.

One grille has a formed end panel and is installed at the end of the reflector that is furthest from the burner box. The other grille has an open-end and is installed closest to the burner box.

To purchase the protective grille for your heater, please contact your installer.



 WARNING	
	<p>Burn Hazard</p> <p>Keep all persons, especially children, away from heater.</p> <p>Do not touch any part of the heater.</p> <p>Heater is very hot.</p> <p>Failure to follow these instructions can result in injury.</p>

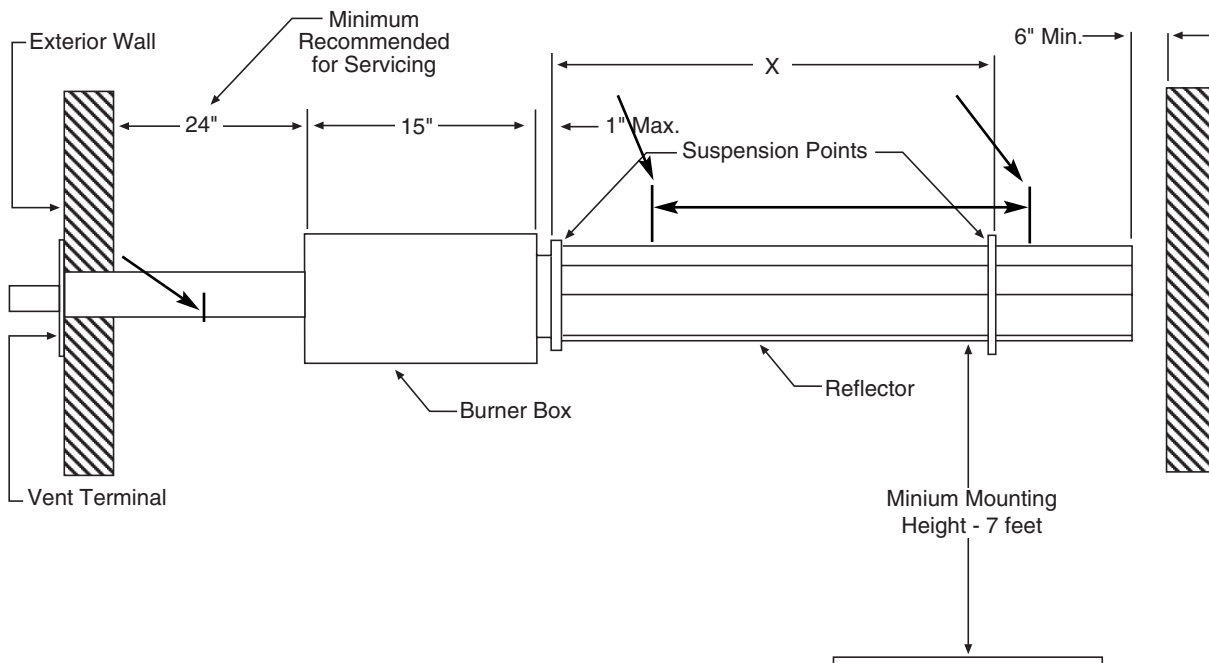
- Do not touch the heater.
- Keep all persons, especially children, away from the heater.
- Use of protective grille (included with select models) is recommended.

Rear Movable Hanger Limits

The illustration below shows a typical installation of the CGTH Series heater. The drawing specifies the allowable range of distance between the front fixed hanger and the rear movable hanger.

The rear hanger should only be moved if the distance between both hangers is not within the allowable range.

L Dimension		
Model	Max.	Min.
CGTH-30	60"	72"
CGTH-40	102"	114"
CGTH-50	102"	114"



*For minimum mounting height of aircraft hangars and public garages, see page 10.

To turn on gas and electric to the heater

1. Turn on the manual gas valve. Use only your hand to turn the gas valve handle. Never use tools. If the handle can not turn by hand, do not try to repair it, call a licensed contractor. Force or attempted repair can result in a fire or explosion.
2. Turn on electric power to the heater.

WARNING



Electrical Shock Hazard

**Plug heater into grounded three-prong ceiling receptacle.
Do not cut or remove the grounding prong from this plug.
Do not use with an extension cord.**

Failure to follow these instructions can result in death or electrical shock.

3. Set the thermostat to the desired setting.
4. This heater is equipped with an ignition device which automatically lights the burner. Do not try to light the burner with a match.
5. If the heater can not operate, follow the instructions 'To turn off gas and electric to the heater' and call a licensed gas fitter or contractor.

To turn off gas and electric to the heater

1. To turn off gas and electric to the heater, set the thermostat to the 'OFF' position.
2. Turn off the manual gas valve.
3. Unplug the heater from the three-prong ceiling receptacle if service is to be performed.

WARNING



Electrical Shock Hazard

Unplug the heater before service is done by a licensed installer.

Failure to follow these instructions can result in death or electrical shock.

To turn off the heater

1. Set the thermostat to the 'OFF' position.

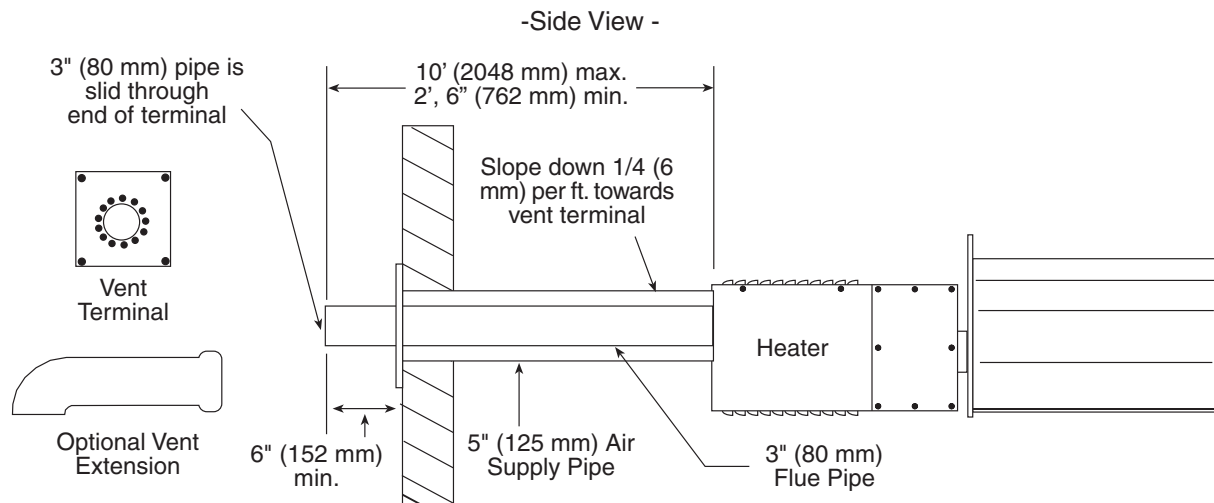
⚠ WARNING	⚠ ATTENTION
<p>Carbon Monoxide Hazard Heater must be exhausted outside. Use materials supplied. Failure to follow these instructions will result in death or injury.</p> <p>© ROBERTS GORDON</p>	<p>Risque de monoxyde de carbone L'échappement du radiateur doit s'effectuer à l'extérieur. Utilisez le matériel fourni. Le non-respect de ces consignes peut entraîner mort ou blessures.</p> <p>Printed in the U.S.A. P/N 91037300 Rev. B</p>



Venting

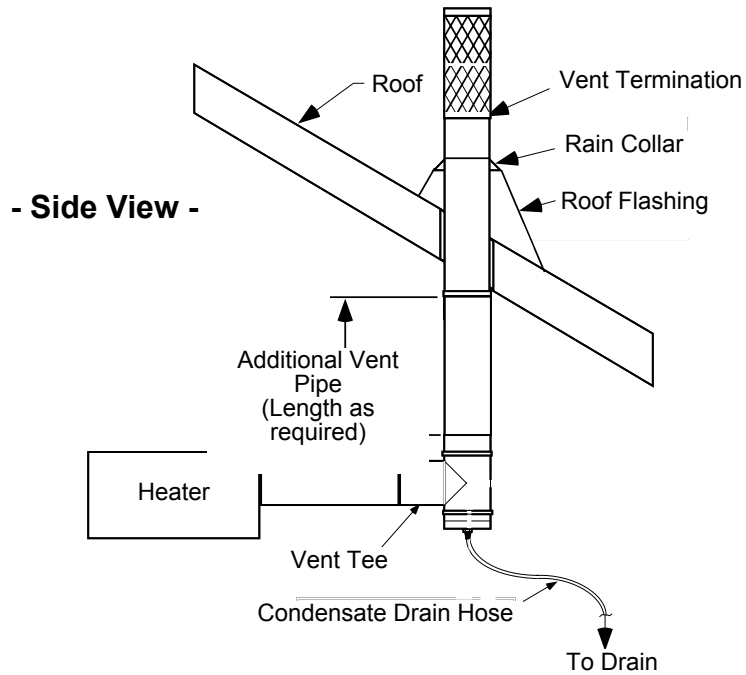
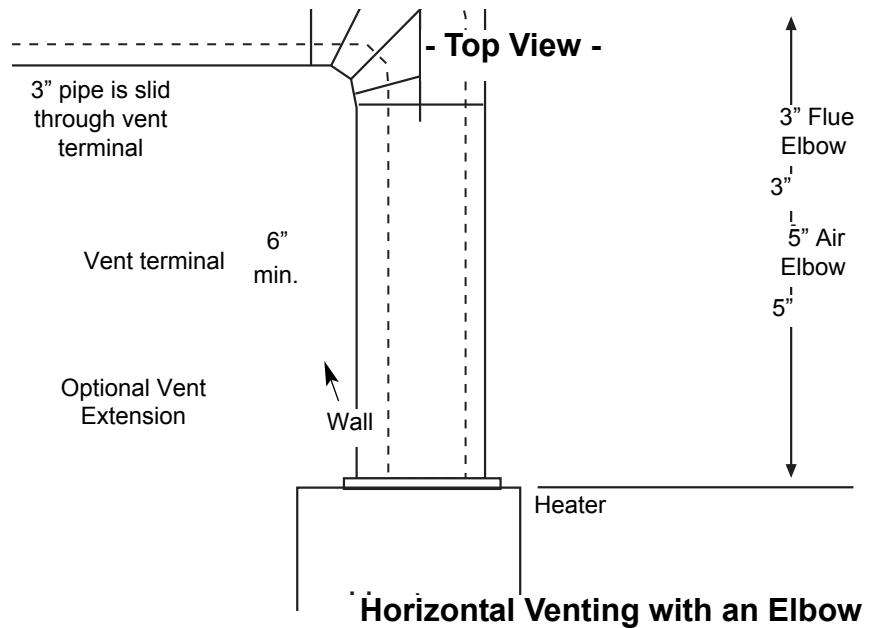
As mentioned on page 5, it is the Installer's Responsibility to properly vent (exhaust) the heater outside. Please make sure your heater is vented. If it is not vented, do not use the heater. Immediately call your installer.

You heater may be vented in one of three ways: horizontal through the wall, horizontal with an elbow through the wall or vertical through the roof. You should know the way your heater is vented. Refer to the following drawings to determine the type of venting you have. If you are not sure, please contact your installer.



Horizontal Venting Through the Wall

Venting (continued)



Roof Venting

Using the roof vent will cause condensate (water) to form in the vent. Roberts-Gordon recommends the installer install drain hose for the condensate. Please make sure you have a drain hose. If you do not, contact your installer.

The condensate must drain to a pail, bucket or preferably to a plumbing drain. If you use a pail or bucket, remember to empty the contents periodically.

WARNING

Installation, Service and Annual Inspection must be done by a contractor qualified in the installation and service of gas-fired heating equipment. Failure to follow these instructions can result in death, injury or property damage.

To ensure your safety and years of trouble-free operation of the heater, inspections by both the contractor and owner are essential.

Annual Inspection

Before every heating season, a licensed contractor must perform a thorough inspection of the heater. The gas, electrical and thermostat connections as well as the venting and suspensions are some of the areas requiring inspection.

Monthly Inspection


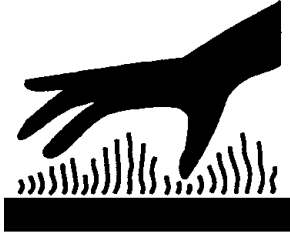
The owner must visually inspect the heater each month using the checklist below. Check only the items on this list and follow the instructions given.

REMEMBER TO CHECK:

The vicinity of the heater	Do not store or use flammable objects, liquids or vapors near the heater. Immediately remove these items if they are present.
Vehicles and other objects	Keep the minimum required safe distances away from heater. Do not hang anything from, or place anything on, the heater. Make sure nothing is lodged underneath the reflector, in between the heat exchanger tubes or in the protective grille (included with select models). Immediately remove objects in violation of the minimum required safe distances from combustibles.
Power Cord	There should be no exposed wire on the cord or damage on the plug. Contact a licensed contractor for repair. Do not use with an extension cord.


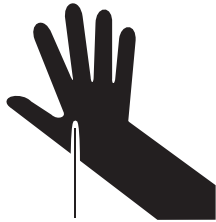
REMEMBER TO CHECK:

Inside Venting	<p>Venting must be intact. Look for cracks on the vent, gaps in the sealed areas or rust.</p> <p>The area must be free of dirt and dust.</p> <p>Contact a licensed contractor for repair.</p>
Outside Air Inlet	<p>Inlet must be intact. Look for cracks on the tube, gaps in the sealed areas or rust.</p> <p>Make sure nothing is blocking the vent.</p> <p>The area must be free of dirt and dust.</p> <p>Contact a licensed contractor for repair.</p>
Heat Exchanger Tubes	<p>Make sure there are no cracks.</p> <p>Contact a licensed contractor for repair.</p>
Gas Line	<p>Contact a licensed contractor for repair.</p>
Thermostat	<p>There should be no exposed wire or damage to the thermostat.</p> <p>Safety tag must be mounted over thermostat.</p> <p>Contact a licensed contractor for repair.</p>
Suspension Points	<p>Make sure the heater is hanging securely. Look for signs of wear on the chain or ceiling.</p> <p>Contact a licensed contractor for repair.</p>
Protective Grille (included with select models)	<p>The grille must be securely attached. If the grille is loose or off, contact a licensed contractor for repair.</p>
Condensate Pail or Bucket (only when roof vented)	<p>Empty condensate(water) periodically.</p>
Bird Screen	<p>Make sure nothing is lodged in screen. Immediately remove objects.</p> <p>The screen must be securely attached. If the screen is loose or off, contact a licensed contractor for repair.</p> <p>See Page 18 for location of bird screen.</p>

 WARNING	
	<p align="center">Burn Hazard</p> <p>Do not touch any part of the heater when running.</p> <p>Heater is very hot.</p> <p>Heater must be off and cool before cleaning.</p> <p>Failure to follow these instructions can result in injury.</p>

Basic Heater Care

- Make sure the heater is off and cool. Dust the heater off with a dry cloth.
- Do not use the heater in an area containing corrosive chemicals.
- Do not install or use the heater outdoors.
- Do not use the heater if any part has been under water. Immediately call a licensed contractor to inspect the heater and to replace any part of the control system which has been under water.
- Do not paint any part of the heater.

 WARNING	
	<p align="center">Cut Hazard</p> <p>Do not touch edges of heater.</p> <p>Edges are sharp.</p> <p>Failure to do so can result in injury.</p>

Replacement Parts

Use only genuine Roberts-Gordon parts.

Use of parts not specified by Roberts-Gordon voids warranty.

Failure to follow these instructions can result in property damage.

THE ROBERTS GORDON® BLACKHEAT™GH LIMITED WARRANTY

ROBERTS-GORDON WILL PAY FOR:

ROBERTS GORDON® warrants to the original owner-user that this ROBERTS GORDON® product will be free from defects in material and workmanship. This warranty is limited to thirty-six (36) months from the date of purchase by the original consumer, or forty-two (42) months from date of shipment by Roberts-Gordon, whichever occurs first.

ROBERTS GORDON® replacement parts are warranted for the period of the original ROBERTS GORDON® BLACKHEAT™GH Warranty.

ROBERTS-GORDON WILL NOT PAY FOR:

Service trips, service calls and labor charges.
Shipment of replacement parts.

Damage due to:

Failure to install, operate or maintain the ROBERTS GORDON® BLACKHEAT™GH as directed in Installation, Manual. You must follow requirements printed in this manual.

Misuse, abuse, neglect or modification of the ROBERTS GORDON® BLACKHEAT™GH in any way.

Improper service, use of replacement parts or accessories that are not specified by Roberts-Gordon.

Improper installation, or any relocation of the ROBERTS GORDON® BLACKHEAT™GH after initial installation.

Incorrect supply, accident, fire, flood, acts of God or other casualty.

Use of the ROBERTS GORDON® BLACKHEAT™GH for other than its intended purpose.

Use of the ROBERTS GORDON® BLACKHEAT™GH in a corrosive atmosphere or any atmosphere containing contaminants.

Shipping. Claim must be filed with carrier.

Use of the ROBERTS GORDON® BLACKHEAT™GH in the vicinity of combustible or explosive materials.

Any defect in the ROBERTS GORDON® BLACKHEAT™GH arising from a drawing, design or specification supplied by or on behalf of the consumer.

Failure of parts not manufactured by Roberts-Gordon in respect of any claim where the total price of the goods has not been paid.

WARRANTY IS VOID IF:

The ROBERTS GORDON® BLACKHEAT™GH is not installed by a contractor qualified in the installation and service of gas fired heating equipment.

You cannot prove original purchase date and required annual maintenance history.

The data plate and/or serial number are removed, defaced, modified or altered in any way.

The ROBERTS GORDON® BLACKHEAT™GH is transferred. This warranty is nontransferable.

Roberts-Gordon is not permitted to inspect the damaged burner and/or component parts.

READ YOUR INSTALLATION MANUAL

If you have questions about your heater, contact your installing professional. Should you need Replacement Parts or have additional questions, call or write ROBERTS-GORDON®:

U.S.A.

1250 William Street
P.O. Box 44
Buffalo, New York 14240-0044
716.852.4400

CANADA

76 Main Street West, Unit 10
Grimsby, Ontario L3M 1R6
905.945.5403

ON THE WEB AT:

www.rg-inc.com

Roberts-Gordon's liability, and your exclusive remedy, under this warranty or any implied warranty (including the implied warranties of merchantability and fitness for a particular purpose) is limited to providing replacement parts during the term of this warranty.

Some jurisdictions do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you. There are no rights, warranties or conditions, expressed or implied, statutory or otherwise, other than those contained in this warranty.

Roberts-Gordon shall in no event be responsible for incidental or consequential damages or incur liability for damages in excess of the amount paid by you for the ROBERTS GORDON® BLACKHEAT™GH.

Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

Roberts-Gordon shall not be responsible for failure to perform under the terms of this warranty if caused by circumstances out of its control, including but not limited to fire, flood, strike, government or court orders, unavailability of supplies, parts or power. No person is authorized to assume for Roberts-Gordon any other warranty, obligation or liability.

LIMITATIONS ON AUTHORITY OF REPRESENTATIVES:

No representative of Roberts-Gordon, other than an Executive Officer, has authority to change or extend these provisions. Changes or extensions shall be binding only if confirmed in writing by Roberts-Gordon's duly authorized Executive Officer.

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