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. **Extinguish any open flame.**
6. **Leave the building.**
7. **Immediately call your local gas supplier after leaving the building. Follow the gas supplier's instructions.**
8. **If you cannot reach your gas supplier, call the Fire Department.**

⚠ WARNING

Fire Hazard

Keep all flammable objects, liquids and vapors the minimum required clearances to combustibles away from heater.

Some objects will catch fire or explode when placed close to heater.

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

ROBERTS GORDON

GordonRay® BH

BH-40
BH-60
BH-80
BH-100
BH-115
BH-125
BH-140
BH-150
BH-175
BH-200

Fuel Conversion Kit Instructions

⚠ 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 in order to provide your serviceman with necessary information.

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P/N 270101NA Rev. F 06/12

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SECTION 1: HEATER SAFETY

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.

Installation, service and annual inspection of heater must be done by a contractor qualified in the installation and service of gas-fired heating equipment.

Read this manual carefully before installation, operation or service of this equipment.

Due to the nature of gas conversions, it is important you use the correct conversion kit for the heater model and gas you are converting to. Use only genuine ROBERTS GORDON® conversion kits.

This heater is designed for heating nonresidential indoor spaces. Do not install in residential spaces. These instructions, the layout drawing, local codes and ordinances, and applicable standards that apply to gas piping, electrical wiring, venting, etc. must be thoroughly understood before proceeding with the installation.

Protective gear is to be worn during installation, operation and service. Thin sheet metal parts, including the aluminum reflector portion of the heater and the various venting components, have sharp edges. To prevent injury, the use of work gloves is recommended. The use of gloves will also prevent the transfer of body oils from the hands to the surface of the reflector.

Before installation, check that the local distribution conditions, nature of gas and pressure, and adjustment of the appliance are compatible.

This heater must be applied and operated under the general concepts of reasonable use and installed using best building practices.
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do no play with the appliance.

For additional copies of the Installation, Operation and Service Manual, please contact Roberts-Gordon LLC.

1.1 Manpower Requirements

To prevent personal injury and damage to the heater, two persons will be required for installation.

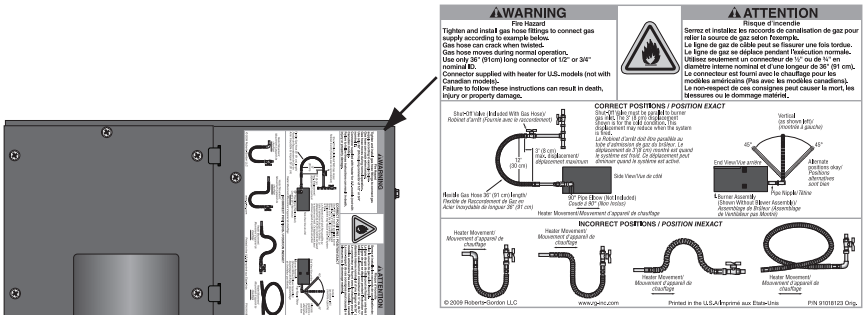
1.2 Safety Labels and Their Placement

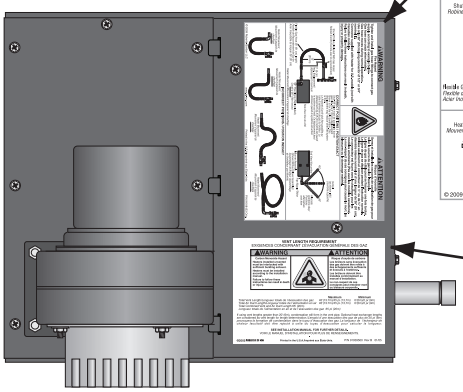
Product safety signs or labels should be replaced by the product user when they are no longer legible. Please contact Roberts-Gordon or your ROBERTS GORDON® independent distributor to obtain replacement signs or labels. *See Page 2, Figure 1 through Page 3, Figure 2*.

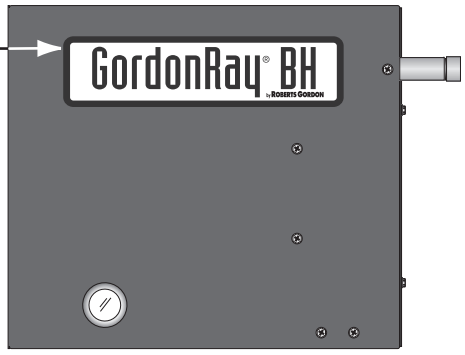
1.3 California Proposition 65

In accordance with California Proposition 65 requirements, a warning label must be placed in a highly visible location on the outside of the equipment (i.e., near equipment's serial plate). See label placement drawing *on Page 2, Figure 1* for label location. Avoid placing label on areas with extreme heat, cold, corrosive chemicals or other elements. To order additional labels, please contact Roberts-Gordon LLC or your ROBERTS GORDON® independent distributor.

FIGURE 1: Top and Bottom Panel Label Placement

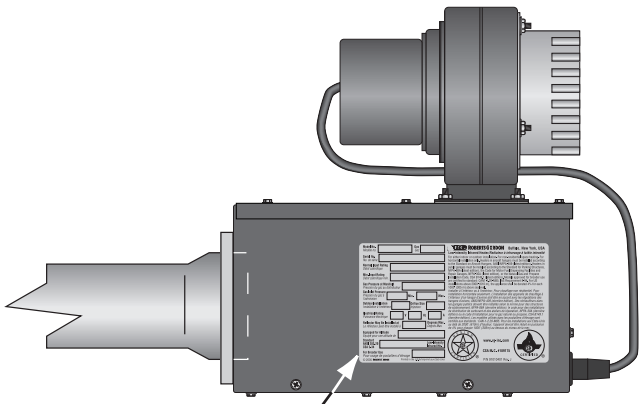




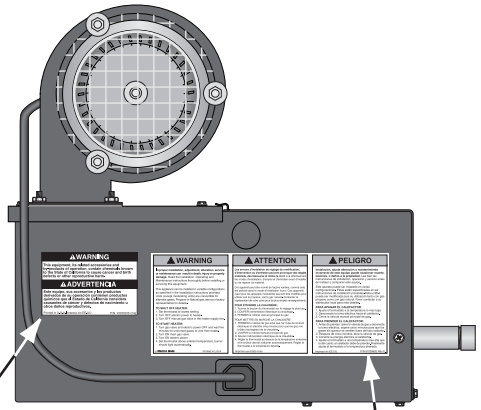


Description	Part Number
Logo Label	91031100
Vent Length Label	91039500
Gas Connection Label	91018123

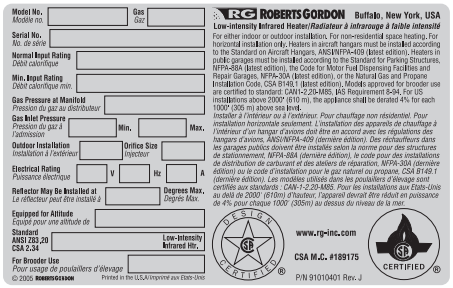
FIGURE 2: Side and Back Panel Label Placement



Side Panel

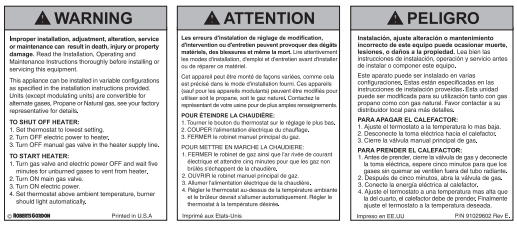


Back Panel

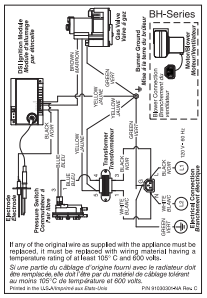


Rating Plate Label

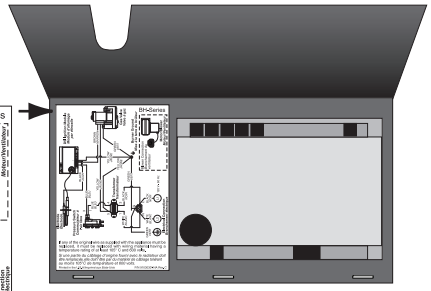
Proposition 65 Label



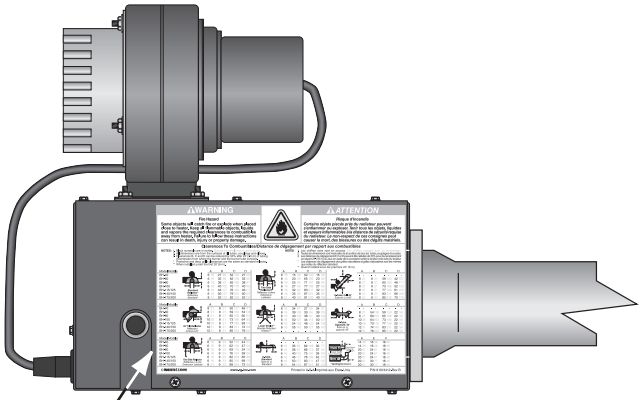
Lighting Instruction Plate Label



Wiring Label

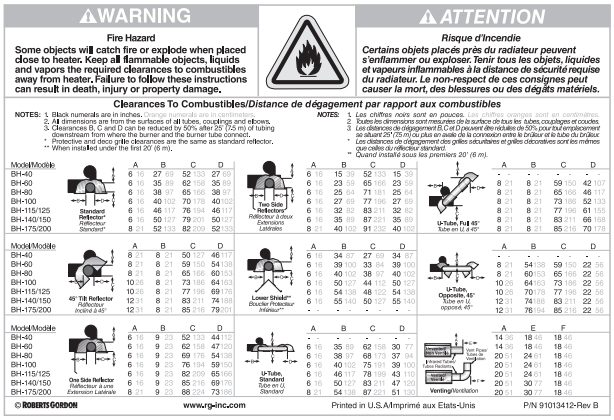


Control Door (Inside)



Control Side Panel

Description	Part Number
Rating Plate Label	91010401
Lighting Instruction Plate Label	91029602
Wiring Label	91030301
Clearances to Combustibles Label	91013412
Proposition 65 Label	91070016
Thermostat Connection Label (not shown)	91037902



Clearances to Combustibles Label

SECTION 2: INSTALLER RESPONSIBILITY

The installer is responsible for the following:

- To install the heater, as well as the gas and electrical supplies, in accordance with applicable specifications and codes. Roberts-Gordon recommends the installer contact a local Building Inspector or Fire Marshal for guidance.
- To use the information given in a layout drawing and in the manual together with the cited codes and regulations to perform the installation.
- To install the heater in accordance with the clearances to combustibles.
- To furnish all needed materials not furnished as standard equipment.
- To plan location of supports.
- To provide access to burners for servicing on all sides for burner removal.
- To provide the owner with a copy of this installation, operation and service manual.
- To never use heater as support for a ladder or other access equipment and never hang or suspend anything from heater.
- To ensure there is adequate air circulation around the heater and to supply air for combustion, ventilation and distribution in accordance with local codes.
- To safely and adequately install heater using materials with a minimal working load of 75 lbs (33 kg).
- To ensure the heater is placed in a approved application.

2.1 Wall Tag

A laminated wall tag is available for the heater as a permanent reminder of the safety instructions and the importance of the required clearances to combustibles. Please contact Roberts-Gordon or your ROBERTS GORDON® independent distributor to obtain the wall tag. Affix the tag by peeling off the backing of the adhesive strips on the rear surface and position the tag on a wall near the heater (e.g. thermostat or ROBERTS GORDON® Controller).

A copy of the wall tag (P/N 91037912) is illustrated on the back cover. For an immediate solution, you may affix this copy on the wall near the heater.

Know your model number and installed configuration. Model number and installed configuration are found on the burner and in the Installation, Operation and Service Manual. Write the proper clearance dimensions in permanent ink according to your model number and configuration in the open spaces on the tag.

2.2 Corrosive Chemicals

⚠ CAUTION

Product Damage Hazard

Do not use heater in area containing corrosive chemicals.

Refer to appropriate Material Safety Data Sheets (MSDS).

Failure to follow these instructions can result in product damage.

Roberts-Gordon cannot be responsible for ensuring that all appropriate safety measures are undertaken prior to installation; this is entirely the responsibility of the installer. It is essential that the contractor, the sub-contractor, or the owner identifies the presence of combustible materials, corrosive chemicals or halogenated hydrocarbons* anywhere in the premises.

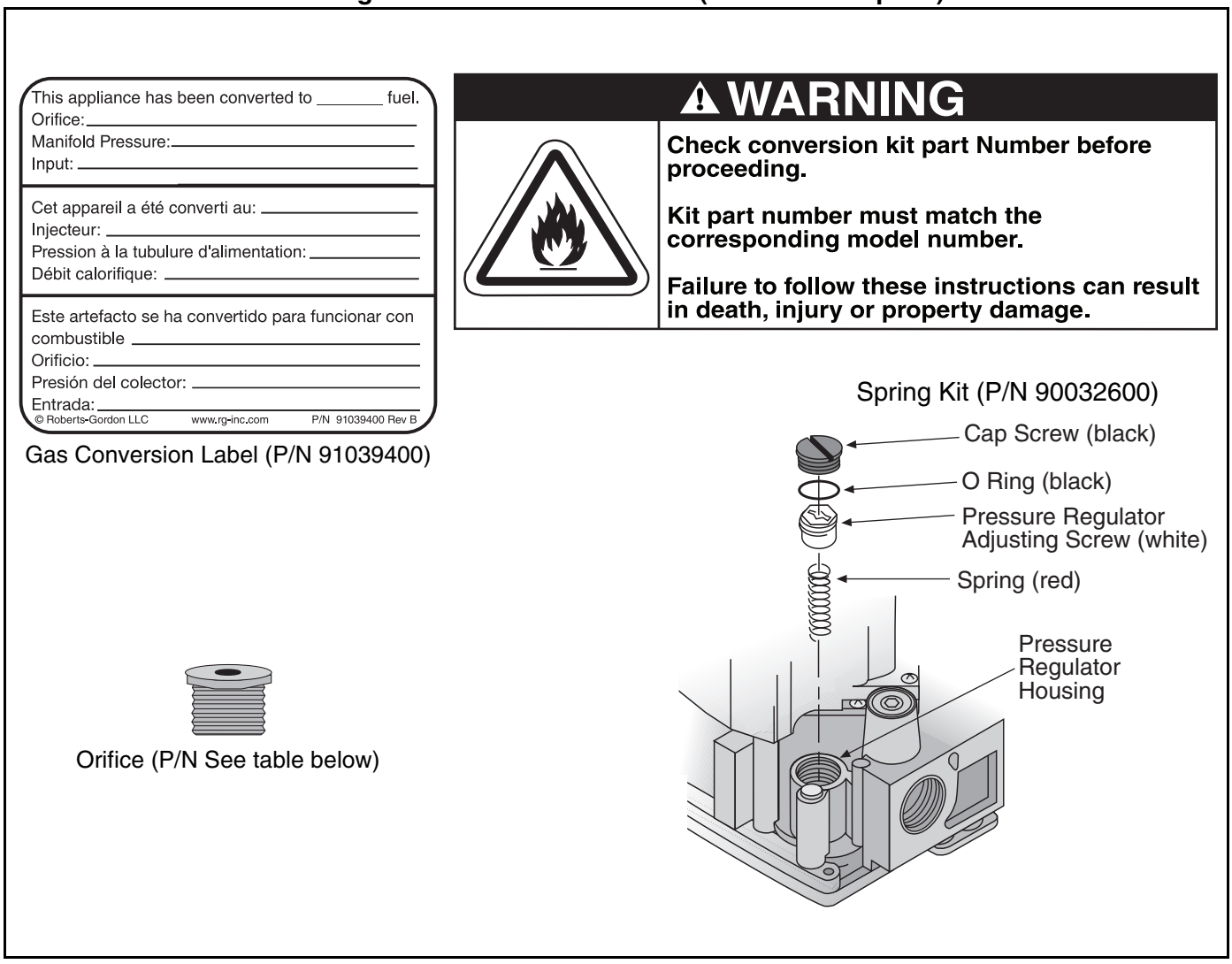
** **Halogenated Hydrocarbons** are a family of chemical compounds characterized by the presence of halogen elements (fluorine, chlorine, bromine, etc.). These compounds are frequently used in refrigerants, cleaning agents, solvents, etc. If these compounds enter the air supply of the burner, the life span of the heater components will be greatly reduced. An outside air supply must be provided to the burners whenever the presence of these compounds is suspected. Warranty will be invalid if the heater is exposed to halogenated hydrocarbons.*

2.3 National Standards and Applicable Codes

All appliances must be installed in accordance with the latest revision of the applicable standards and national codes. This refers also to the electric, gas and venting installation. Note: Additional standards for installations in Public Garages, Aircraft Hangars, etc. may be applicable.

SECTION 3: FOR NATURAL TO PROPANE CONVERSIONS ONLY

FIGURE 3: Conversion Kit Regulator Installation in Valve (Natural to Propane)



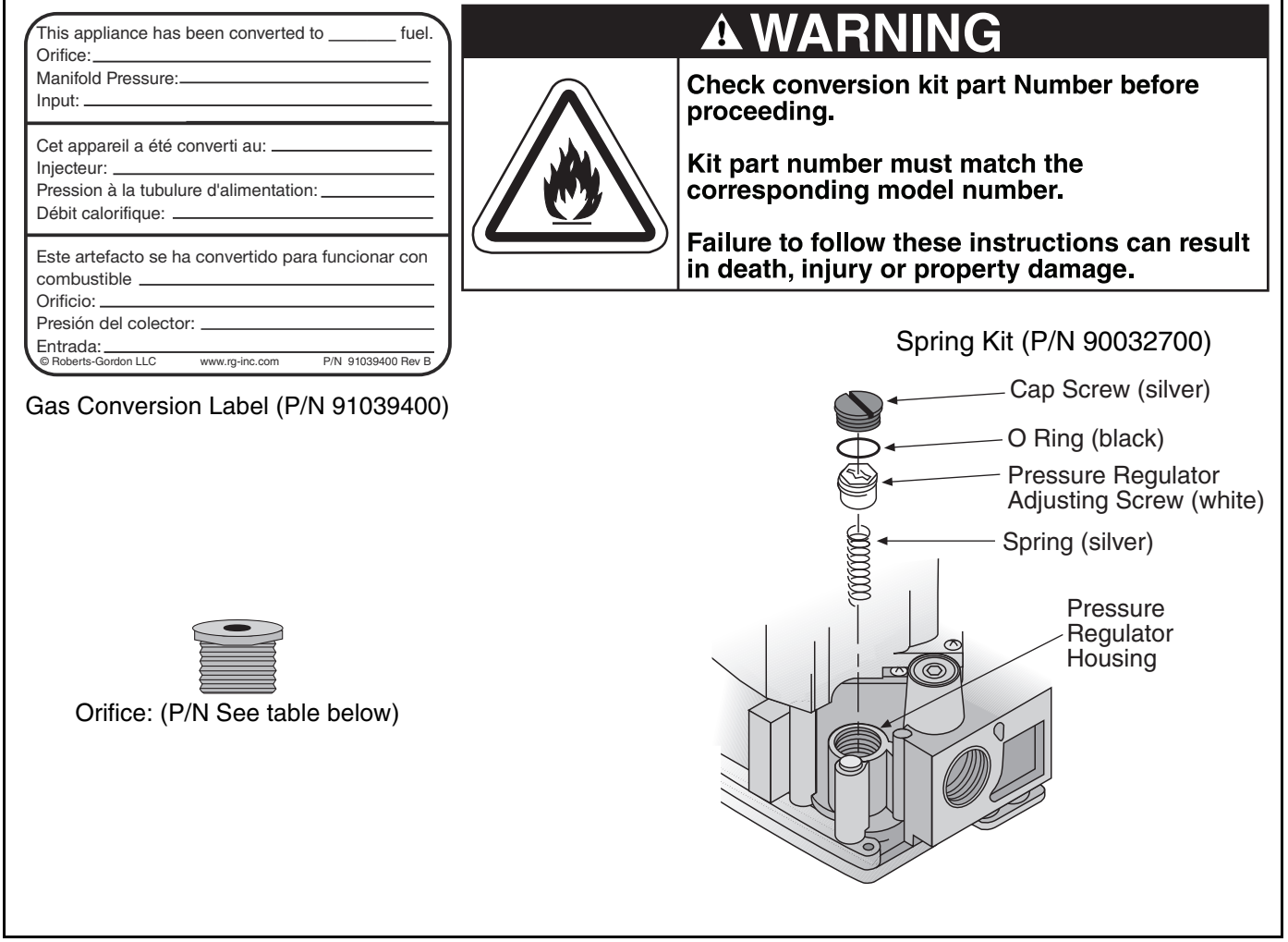
3.1 Contents of Fuel Conversion Kits (Natural to Propane)

All kits include this manual and the Installation, Operation and Service Manual.

Kit Number	Model	Orifice P/N	Label	Spring Kit
BH040NP	BH-40	91910449	91039400	90032600
BH060NP	BH-60	91910444	91039400	90032600
BH080NP	BH-80	91910437	91039400	90032600
BH100NP	BH-100	91910433	91039400	90032600
BH115NP	BH-115	91910490	91039400	90032600
BH125NP	BH-125	91910430	91039400	90032600
BH140NP	BH-140	91910429	91039400	90032600
BH150NP	BH-150	91910428	91039400	90032600
BH175NP	BH-175	91910425	91039400	90032600

SECTION 4: FOR PROPANE TO NATURAL CONVERSIONS ONLY

FIGURE 4: Conversion Kit Regulator Installation in Valve (Propane to Natural)



4.1 Contents of Fuel Conversion Kits (Propane to Natural)

All kits include this manual and the Installation, Operation and Service Manual.

Kit Number	Model	Orifice P/N	Label	Spring Kit
BH040PN	BH-40	91910486	91039400	90032700
BH060PN	BH-60	91910426	91039400	90032700
BH080PN	BH-80	91910418	91039400	90032700
BH100PN	BH-100	91910412	91039400	90032700
BH115PN	BH-115	91910403	91039400	90032700
BH125PN	BH-125	91910403	91039400	90032700
BH140PN	BH-140	91910496	91039400	90032700
BH150PN	BH-150	91910496	91039400	90032700
BH175PN	BH-175	91910495	91039400	90032700
BH200PN	BH-200	91910492	91039400	90032700

SECTION 5: FUEL CONVERSION INSTRUCTIONS

⚠WARNING

Severe Injury Hazard

Secure burner to burner tube with bolts and lockwashers.

Hang heater with materials with a minimum working load of 75 lbs (33 kg).

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

NOTE: It may be easier to remove the burner to a workbench; however, it can be converted in place. If you are converting the burner in place, skip to *Step 5.2*.

Step 5.1 Burner Removal

1. Turn off gas supply valve, disconnect gas from burner.
2. Turn off power supply and disconnect wires from burner.
3. Unplug thermostat wires from burner.
4. If outside air is installed, disconnect.
5. Remove the bolts which hold the burner on the transition tube using a 1/2" wrench.
6. Remove the burner. *See Figure 5*.
7. Save the gasket (P/N 02568200) or re-install a new one after conversion.

Step 5.2 Door Assembly Removal

Remove the thumbs screws and set the control side door aside. *See Page 8, Figure 6*.

FIGURE 5: Burner Assembly Overview

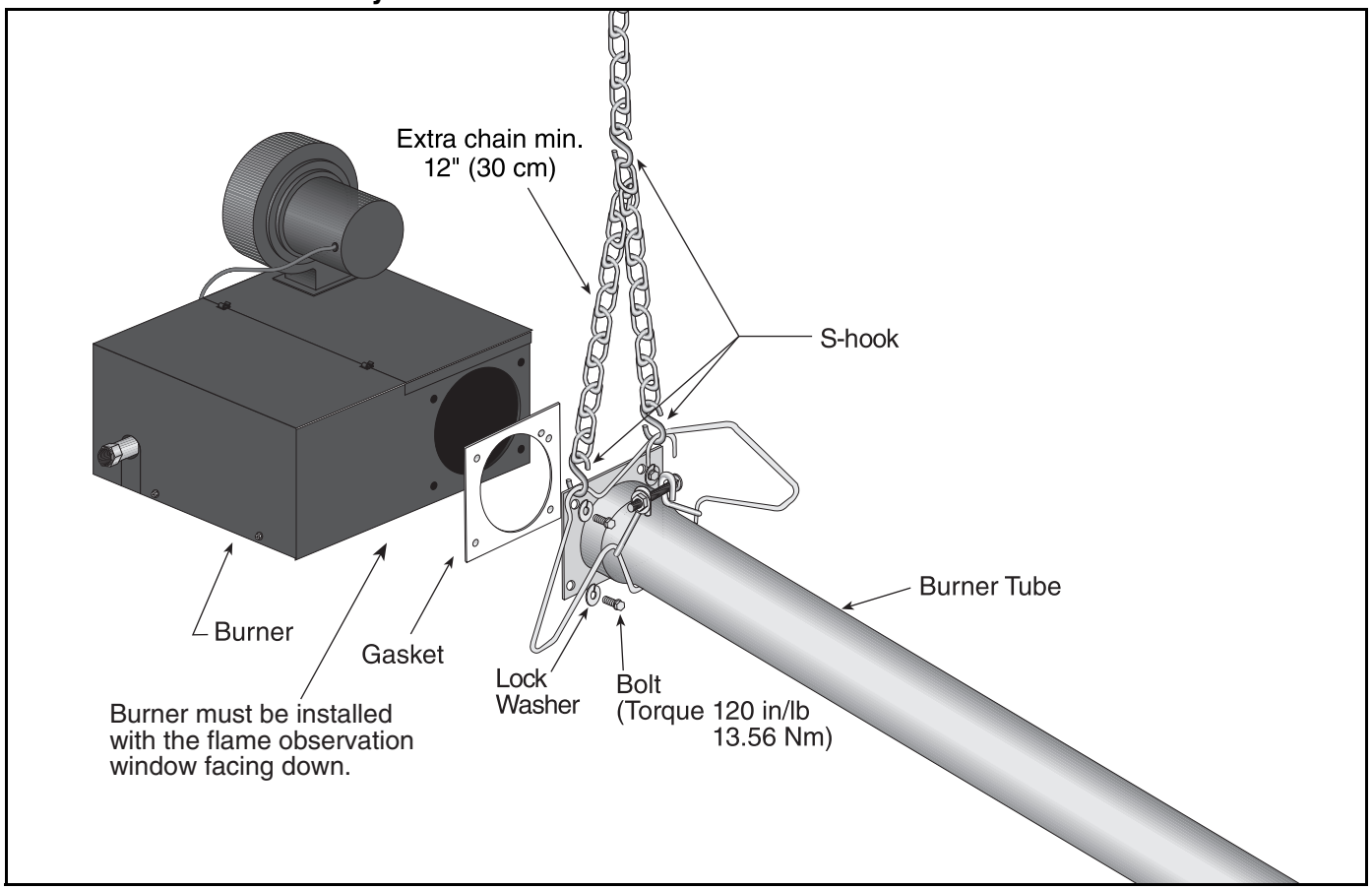


FIGURE 6: Burner (External View)

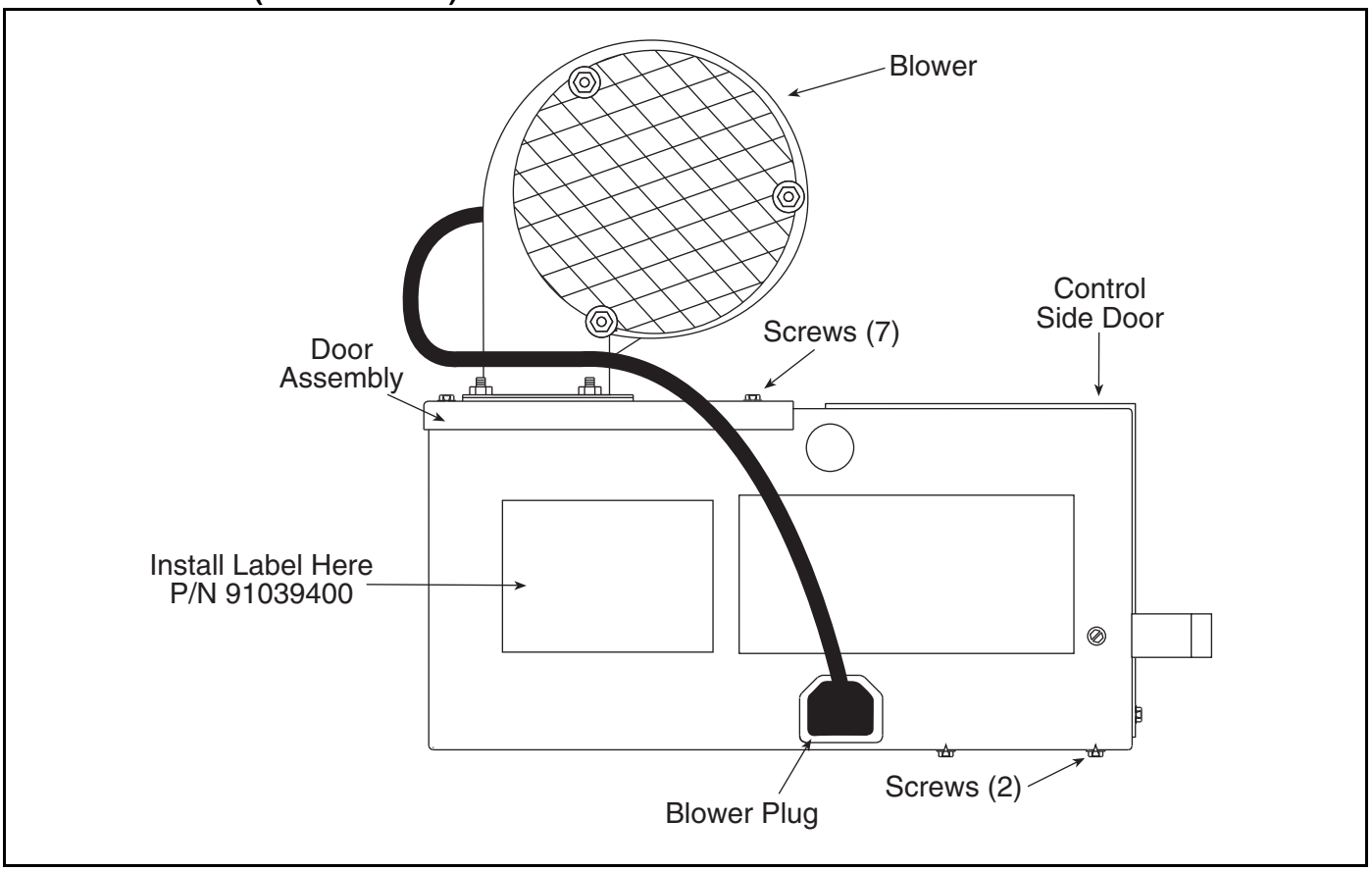
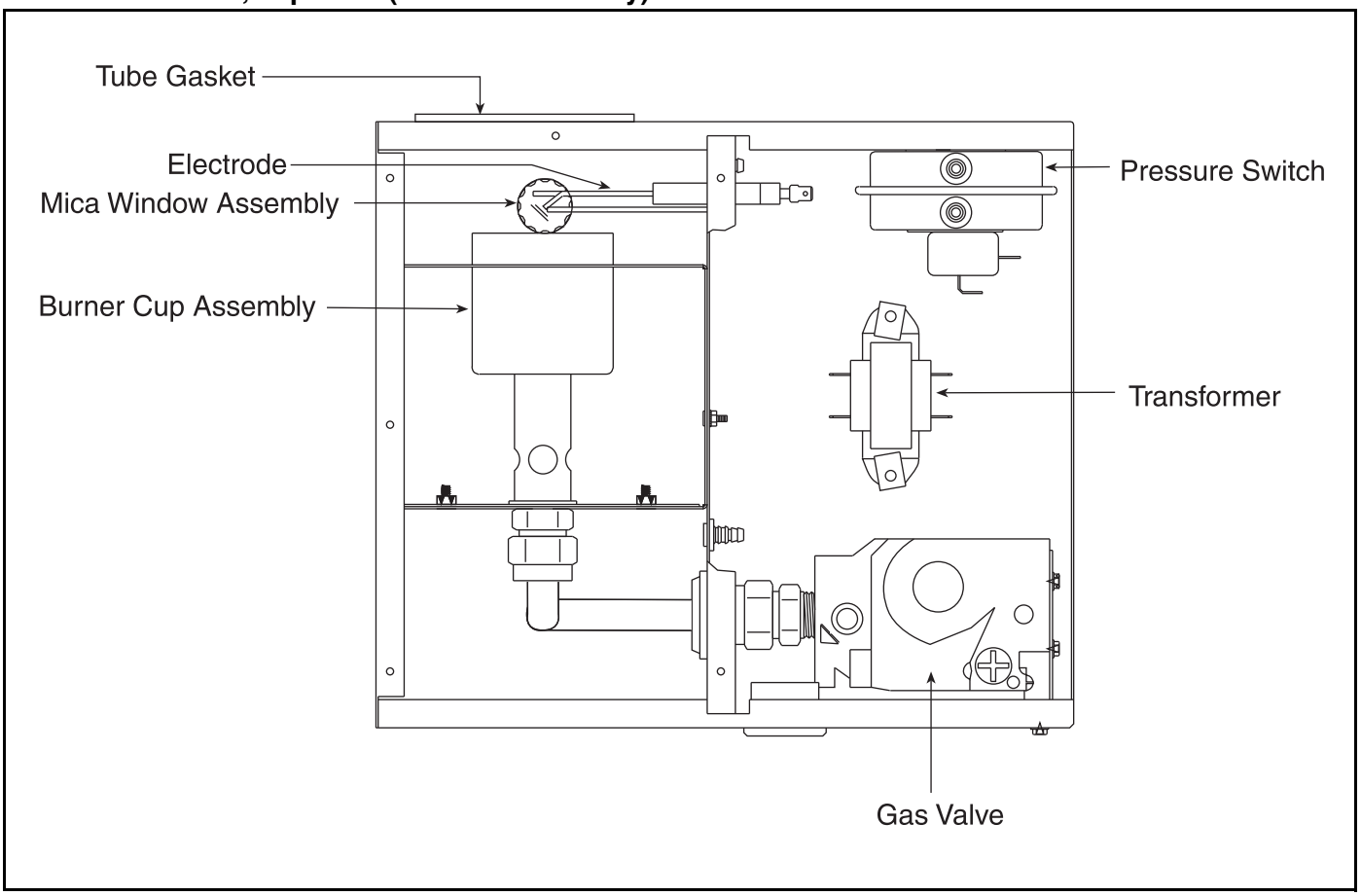


FIGURE 7: Burner, Top View (Internal Assembly)



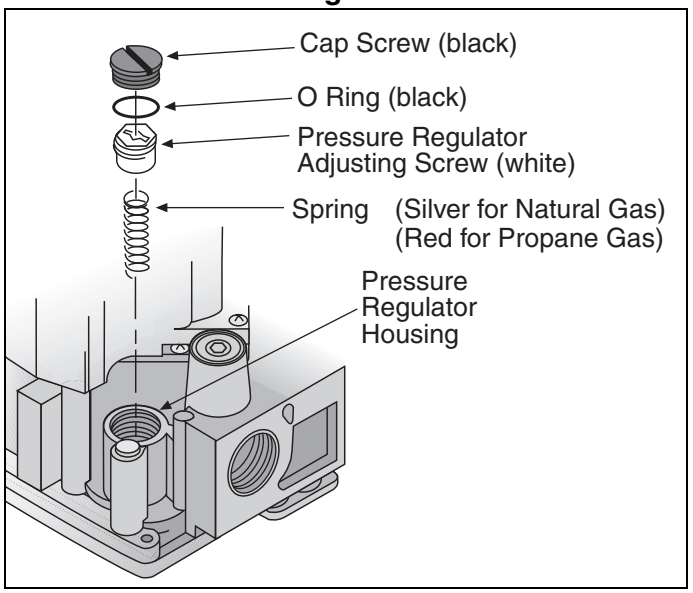
Step 5.3 Burner Cup Assembly Removal

1. Remove the burner cup assembly: Unscrew the burner cup and pull back on the flex manifold to allow the cup to clear the electrode. *See Page 8, Figure 7*.
2. Remove and replace the gas orifice: Use a 1/2" open end wrench (spanner) to remove the orifice. Apply a small amount of pipe sealant to the threads of the replacement orifice. Be aware that over application of sealant may cause blockage of the orifice. Insert and tighten the replacement orifice.
   CAUTION: Do not over-tighten the orifice. The torque value for the orifice is 15 in/lbs; contact your factory representative for more details.

Step 5.4 Burner Cup Assembly Replacement

1. Be sure gas supply to heater is off.
2. Replace the burner cup. Insure the large external tooth washer is in place then tighten the burner cup.
3. Replace the blower side door and plug in blower.
4. Open the control side door: Using a 1/4" nut driver or a Phillips (+)screw driver, remove the two screws and swing the door up. *See Page 8, Figure 6*.
5. Replace the regulator spring. Using a flat head screwdriver, remove the cap from the regulator adjusting screw, remove the screw and remove and replace the spring. NOTE: Silver spring for Natural, red spring for Propane. *See Page 5, Section 3 and Page 6, Section 4* to verify spring kit components.
6. Replace the adjusting screw and turn down approximately 1/2".

FIGURE 8: Pressure Regulator



⚠WARNING

Severe Injury Hazard

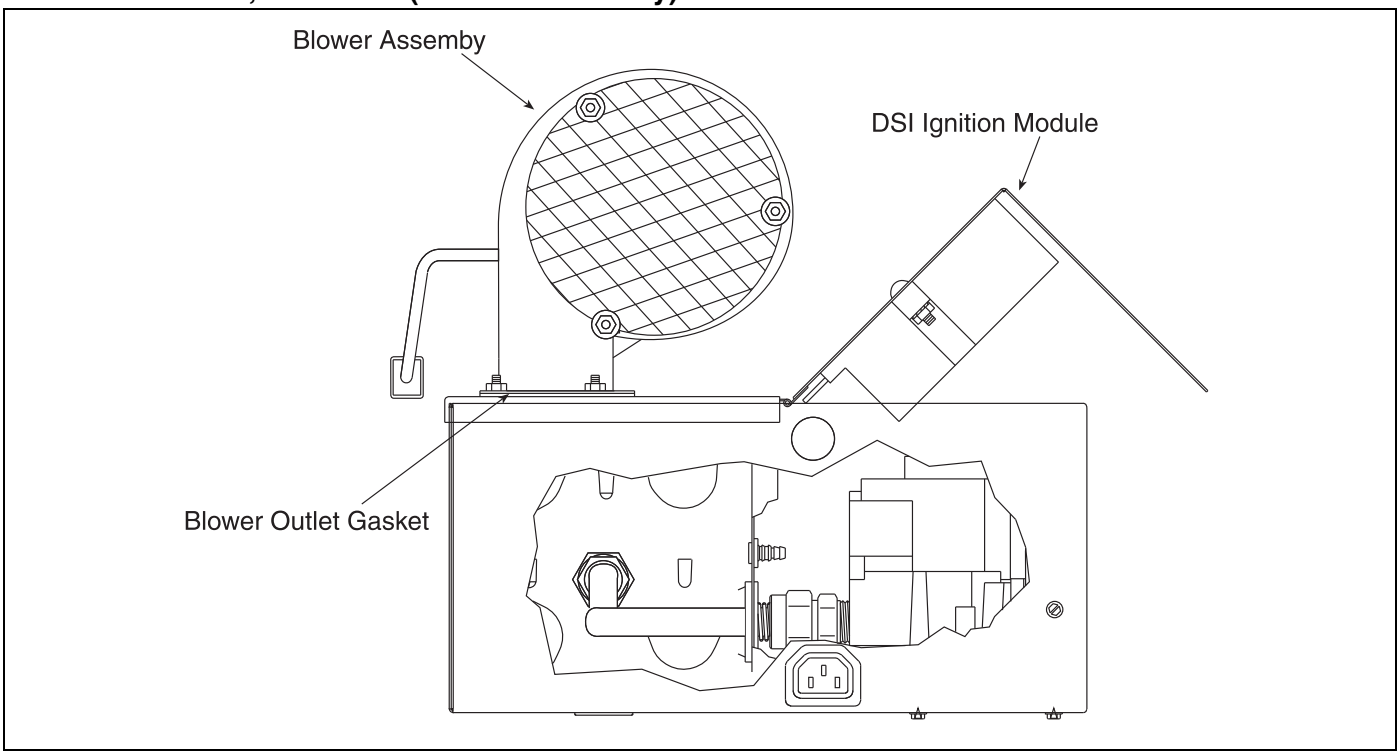
Secure burner to burner tube with bolts and lockwashers.

Hang heater with materials with a minimum working load of 75 lbs (33 kg).

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

7. If the burner is removed, re-install the gasket and the burner on the transition tube by inserting lockwashers and bolts, torque to 120 in/lbs. Reconnect outside air, gas and electrical supplies. For proper installation procedures, see venting, gas piping and electrical sections of the Installation, Operation and Service Manual included in this Conversion Kit.

FIGURE 9: Burner, Side View (Internal Assembly)



Step 5.5 Adjust Regulator

1. Using a 3/16" hex key, remove the plug at the valve outlet and install a test tap and hose. Connect the hose to a liquid filled manometer. *See Page 11, Figure 10*.
2. Turn on gas and power. Turn up thermostat.
3. When unit comes on, adjust the regulator by turning the adjusting screw to set the pressure to:
   Natural: 3.5" wc
   Propane: 10.5" wc
4. Turn off power and gas.
5. Remove test tap and replace plug at valve outlet. Replace O Ring and cap screw.

Step 5.6 Inlet Gas Pressure Checks

The gas inlet pressure to the heater must be checked as follows:

1. Turn off electrical supply to heater.
2. Turn off gas supply to heater.
3. Remove the plug at the valve inlet and install a test tap and hose. Connect the hose to a liquid filled manometer. *See Page 11, Figure 10*.
4. Turn on gas supply to heater.
5. The manometer should read a maximum gas pressure of 14.0" wc for Natural or L.P. gas.
6. Turn on electrical supply to heater.
7. With heater in operation, manometer should read a minimum inlet pressure of 4.5" wc for Natural gas or 11.0" wc for L.P. gas.
8. If in steps 5 and 7, the recommended maximum and minimum pressures are not obtained, the main gas supply pressure to the heater must be adjusted as necessary for compliance.
9. Turn off main gas supply to heater.
10. Turn off electrical supply to heater.
11. Remove manometer and insert pipe plug into valve inlet.
12. Turn on main gas supply to heater.
13. Leak test plug in tapping using soap solution.
14. Turn on electrical supply to heater.

FIGURE 10: Manometer Reading

⚠ DANGER

Electrical Shock Hazard

Disconnect electric before service.

Appliance must be properly grounded.

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

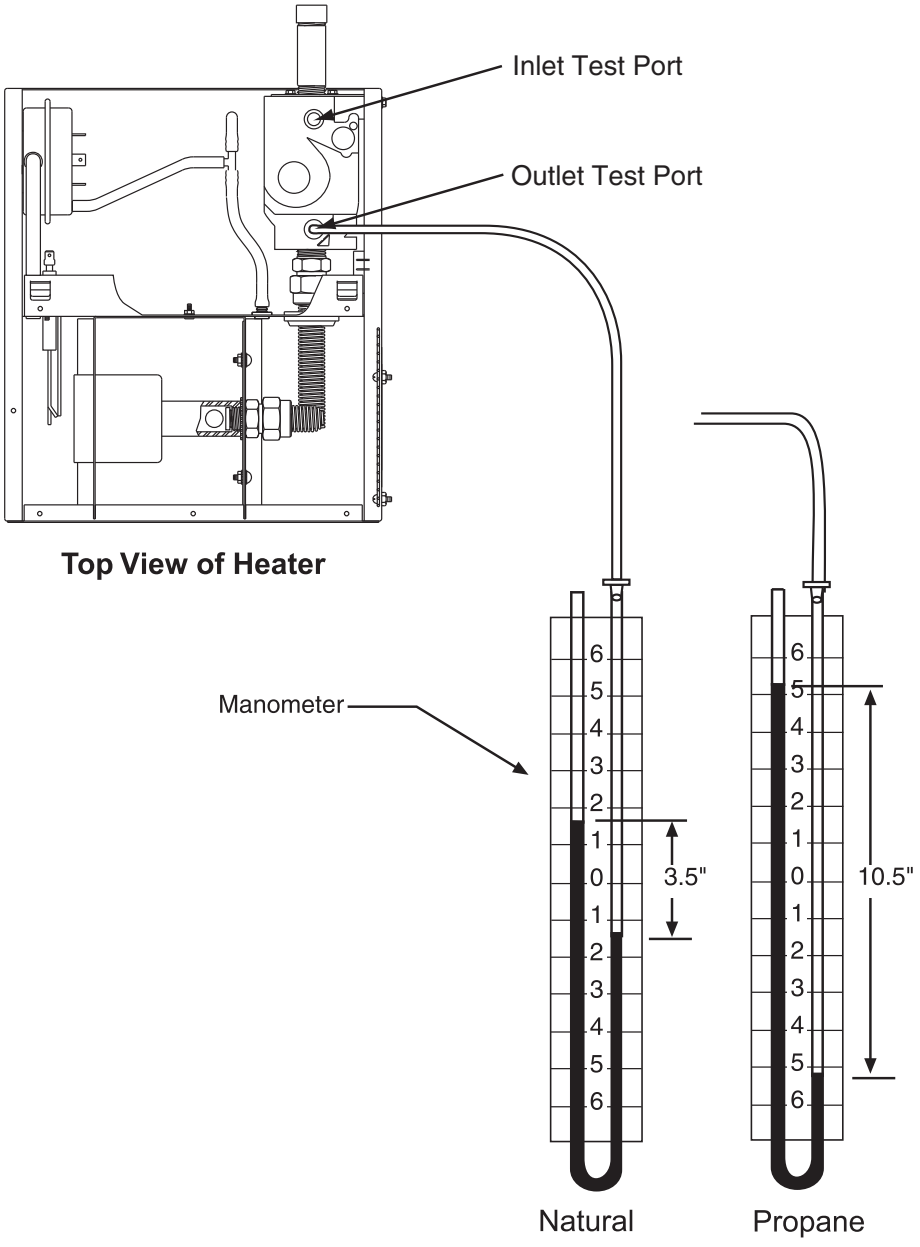
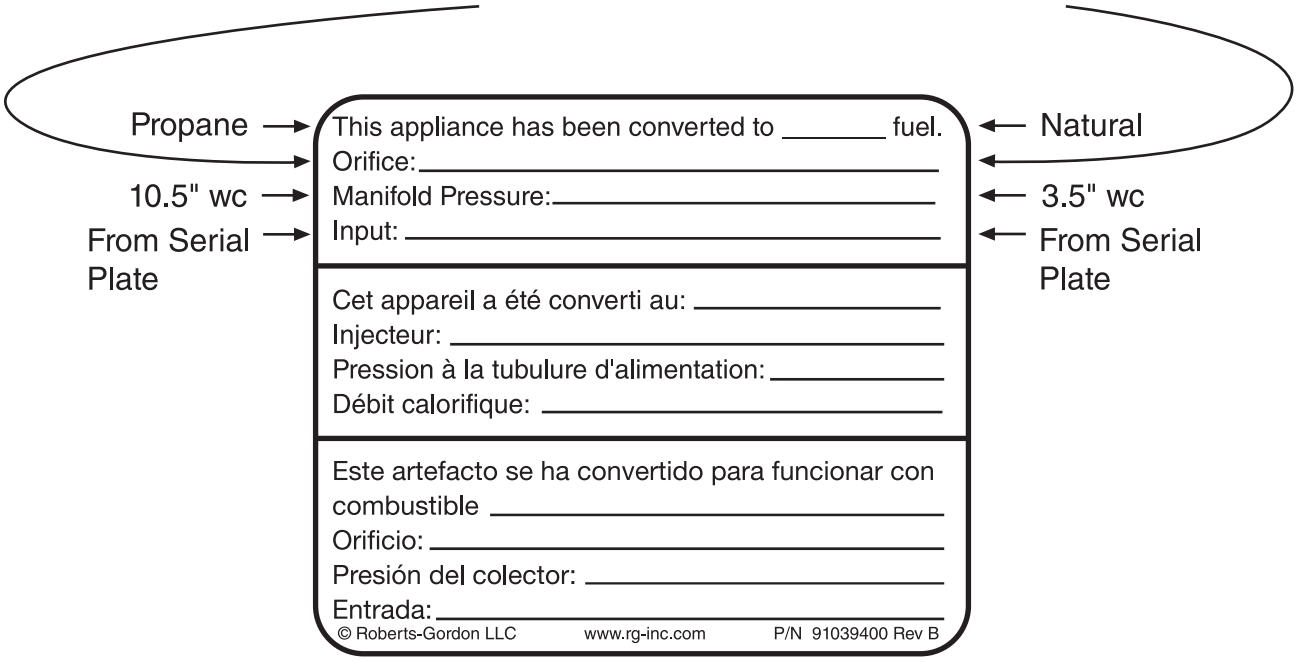


FIGURE 11: Label P/N 91039400

Enter Data for Natural to Propane Conversions		Enter Data for Propane to Natural Conversions	
Model	**Propane Orifice Size**	**Model**	**Natural Orifice Size**
BH-40	#49	BH-40	3.0 mm
BH-60	#44	BH-60	#26
BH-80	#37	BH-80	#18
BH-100	#33	BH-100	#12
BH-115	.125	BH-115	#3
BH-125	#30	BH-125	#3
BH-140	#29	BH-140	"A"
BH-150	#28	BH-150	"A"
BH-175	#25	BH-175	"E"
BH-200	-	BH-200	6.8 mm



Step 5.7 Burner Conversion Label Information

Print the requested information in the fields of the burner conversion label as shown in *See Page 12, Figure 11*.

Step 5.8 Attach Burner Conversion Label

1. Attach the small yellow gas label (included in conversion kit) to the gas valve. Attach the conversion label (P/N 91039400) to the side of the burner housing top. *See Page 8, Figure 6*.
2. Replace the burner housing door.

SECTION 6: CLEARANCES TO COMBUSTIBLES

6.1 Required Clearances to Combustibles

Clearances are the required distances that combustible objects must be away from the heater to prevent serious fire hazards. Combustibles are materials that may catch on fire and include common items such as wood, paper, rubber, fabric, etc. **Maintain clearances to combustibles at all times for safety.**

Clearances for all heater models are located on the burner of the heater and *on Page 14, Figure 12 through Page 16, Figure 19* in this manual. Check the clearances on each burner for the model heater being installed to make sure the product is suitable for your application and the clearances are maintained. Read and follow the safety guidelines below:

- Keep gasoline or other combustible materials including flammable objects, liquids, dust or vapors away from this heater or any other appliance.
- The stated clearances to combustibles represents a surface temperature of 90° F (50°C) above room temperature. Building materials with a low heat tolerance (such as plastics, vinyl siding, canvas, triply, etc) may be subject to degradation at lower temperatures. It is the installer's responsibility to assure that adjacent materials are protected from degradation.
- Maintain clearances from heat sensitive equipment and workstations.
- Maintain clearances from vehicles parked below the heater.
- Maintain clearances from swinging and overhead doors, overhead cranes, vehicle lifts, partitions, storage racks, hoists, building construction, etc.
- In locations used for the storage of combustible materials, signs must be posted to specify the maximum permissible stacking height to maintain required clearances from the heater to the combustibles. Signs must be posted adjacent to the heater thermostat. In the absence of a thermostat, signs must be posted in a conspicuous location.
- Consult local Fire Marshal, Fire Insurance Carrier or other authorities for approval of proposed installation when there is a possibility of exposure to combustible airborne materials or vapors.
- Hang heater in accordance to the minimum suspension requirements.
- If the radiant tubes must pass through the building structure, be sure that adequate sleeving and fire stop is installed to prevent scorching and/or fire hazard.

⚠ WARNING

Fire Hazard

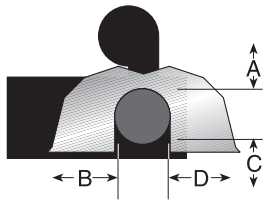
Keep all flammable objects, liquids and vapors the minimum required clearances to combustibles away from heater.

Some objects will catch fire or explode when placed close to heater.

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

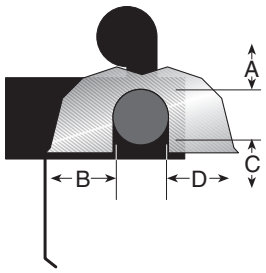
NOTE: 1. All dimensions are from the surfaces of all tubes, couplings and elbows.
2. Clearances B, C and D can be reduced by 50% after 25' (7.5 m) of tubing downstream from where the burner and burner tube connect.

FIGURE 12: Standard Reflector



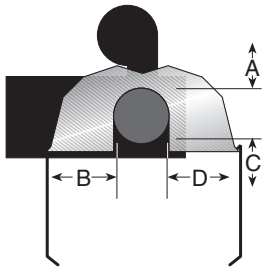
Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	6	27	52	27	16	69	133	69
BH-60	6	35	62	35	16	89	158	89
BH-80	6	38	65	38	16	97	166	97
BH-100	6	40	70	40	16	102	178	102
BH-115/125	6	46	76	46	16	117	194	117
BH-140/150	6	50	79	50	16	127	201	127
BH-175/200	8	52	82	52	21	133	209	133

FIGURE 13: One Side Reflector



Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	6	9	52	44	16	23	133	112
BH-60	6	9	62	47	16	23	158	120
BH-80	6	9	69	54	16	23	176	138
BH-100	6	9	76	59	16	23	194	150
BH-115/125	6	9	82	65	16	23	209	166
BH-140/150	6	9	85	69	16	23	216	176
BH-175/200	8	9	88	73	21	23	224	186

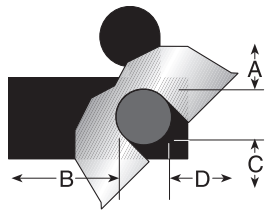
FIGURE 14: Two Side Reflectors



Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	6	15	52	15	16	39	133	39
BH-60	6	23	65	23	16	59	166	59
BH-80	6	25	71	25	16	64	181	64
BH-100	6	27	77	27	16	69	196	69
BH-115/125	6	32	83	32	16	82	211	82
BH-140/150	6	35	87	35	16	89	221	89
BH-175/200	8	40	91	40	21	102	232	102

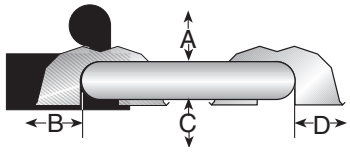
NOTE: 1. All dimensions are from the surfaces of all tubes, couplings and elbows.
2. Clearances B, C and D can be reduced by 50% after 25' (7.5 m) of tubing downstream from where the burner and burner tube connect.

FIGURE 15: 45° Tilt Reflector



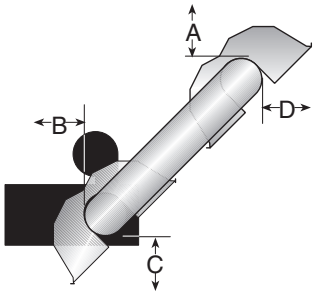
Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	8	8	50	46	21	21	127	117
BH-60	8	8	59	54	21	21	150	138
BH-80	8	8	65	60	21	21	166	153
BH-100	10	8	73	64	26	21	186	163
BH-115/125	10	8	77	69	26	21	196	176
BH-140/150	12	8	83	74	31	21	211	188
BH-175/200	12	8	85	79	31	21	216	201

FIGURE 16: U-Tube, Standard Reflector



Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	- UNAPPROVED -				- UNAPPROVED -			
BH-60	6	35	62	30	16	89	158	77
BH-80	6	38	68	37	16	97	173	94
BH-100	6	40	75	39	16	102	191	100
BH-115/125	6	46	78	43	16	117	199	110
BH-140/150	6	50	83	47	16	127	211	120
BH-175/200	8	54	87	51	21	138	221	130

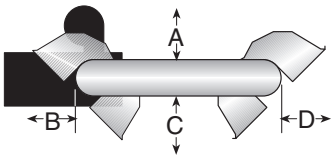
FIGURE 17: U-Tube, 45°



Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	- UNAPPROVED -				- UNAPPROVED -			
BH-60	8	8	59	42	21	21	150	107
BH-80	8	8	65	46	21	21	166	117
BH-100	8	8	73	52	21	21	186	133
BH-115/125	8	8	77	61	21	21	196	155
BH-140/150	8	8	83	66	21	21	211	168
BH-175/200	8	8	85	70	21	21	216	178

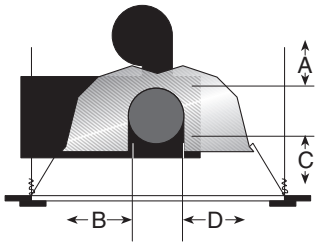
NOTE: 1. All dimensions are from the surfaces of all tubes, couplings and elbows.
2. Clearances B, C and D can be reduced by 50% after 25' (7.5 m) of tubing downstream from where the burner and burner tube connect.

FIGURE 18: U-Tube, Opposite 45° Reflector



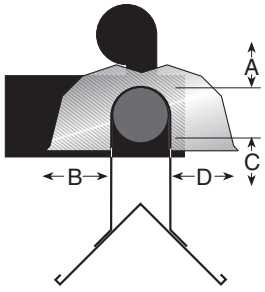
Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	- UNAPPROVED -				- UNAPPROVED -			
BH-60	8	54	59	22	21	138	150	56
BH-80	8	60	65	22	21	153	166	56
BH-100	10	64	73	22	26	163	186	56
BH-115/125	10	70	77	22	26	178	196	56
BH-140/150	12	74	83	22	31	188	211	56
BH-175/200	12	76	85	22	31	194	216	56

FIGURE 19: 2-Foot Deco Grille, 1-Foot Deco Grille and Protective Grille



Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	6	27	52	27	16	69	133	69
BH-60	6	35	62	35	16	89	158	89
BH-80	6	38	65	38	16	97	166	97
BH-100	6	40	70	40	16	102	178	102
BH-115/125	6	46	76	46	16	117	194	117
BH-140/150	6	50	79	50	16	127	201	127
BH-175/200	8	52	82	52	21	133	209	133

FIGURE 20: Lower Clearance Shield*

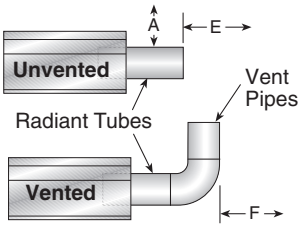


Model	(inches) A	B	C	D	(centimeters) A	B	C	D
BH-40	6	34	27	34	16	87	69	87
BH-60	6	39	33	39	16	100	84	100
BH-80	6	40	38	40	16	102	97	102
BH-100	6	50	44	50	16	127	112	127
BH-115/125	6	54	48	54	16	138	122	138
BH-140/150	6	55	50	55	16	140	127	140
BH-175/200	- UNAPPROVED -				- UNAPPROVED -			

*When installed in the first 10' (3 m).

NOTE: 1. All dimensions are from the surfaces of all tubes, couplings and elbows.
2. Clearances B, C and D can be reduced by 50% after 25' (7.5 m) of tubing downstream from where the burner and burner tube connect.

FIGURE 21:VENTING



Model	(inches) A	E	F	(centimeters) A	E	F
BH-40	14	18	18	36	46	46
BH-60	14	18	18	36	46	46
BH-80	20	24	18	51	61	46
BH-100	20	24	18	51	61	46
BH-115/125	20	24	18	51	61	46
BH-140/150	20	30	18	51	77	46
BH-175/200	20	30	18	51	77	46

SECTION 7: OPERATION AND MAINTENANCE

⚠ DANGER	⚠ WARNING		
Electrical Shock Hazard **Disconnect electric before service.** **Heater must be connected to a properly grounded electrical source.**	**Explosion Hazard** **Turn off gas supply to heater before service.**	**Burn Hazard** **Allow heater to cool before service.** **Tubing may still be hot after operation.**	**Cut/Pinch Hazard** **Wear protective gear during installation, operation and service.** **Edges are sharp.**
Failure to follow these instructions can result in death, electric shock, injury or property damage.			

This heater is equipped with a direct spark ignition system.

7.1 Sequence of Operation

1. Turn the thermostat up. When the thermostat calls for heat, the blower motor will energize.
2. When the motor approaches nominal running RPM, the pressure switch closes and activates the ignition module.
3. After a 45 second prepurge, the ignition module then opens the gas valve and energizes the spark igniter.
4. When the flame is established, the sparking sequence ceases.
5. If the flame is not established during the ignition sequence, the ignition module closes the gas valve and purge begins. Module will try 2 additional times for ignition (with purges in between trials). If ignition is not established, the module will lockout.
6. If the flame extinguishes during operation, the ignition module will attempt the multiple trial sequence described in step 5. If ignition is not re-established, the module will lockout for one hour or until reset.
7. After lockout, the control can be reset by turning down thermostat for five seconds, and then raising it again to desired temperature, or by disconnecting power and then reconnecting.
8. When thermostat is satisfied, all power to the unit is shut off.

7.2 To Shut Off Heater

Set thermostat to lowest setting.
Turn OFF electric power to heater.
Turn OFF manual gas valve in the heater supply line.

7.3 To Start Heater

Turn gas valve and electric power OFF and wait five minutes for unburned gases to vent from heater.
Turn ON main gas valve.
Turn ON electric power.
Set thermostat to desired temperature.
Burner should light automatically.

7.4 Pre-Season Maintenance and Annual Inspection

To ensure your safety and years of trouble-free operation of the heating system, service and annual inspections must be done by a contractor qualified in the installation and service of gas-fired heating equipment.

Turn off gas and electric supplies before performing service or maintenance. Allow heater to cool before servicing.

Before every heating season, a contractor qualified in the installation and service of gas-fired heating equipment must perform a thorough safety inspection of the heater.

For best performance, the gas, electrical, thermostat connections, tubing, venting, suspensions and overall heater condition should be inspected thoroughly.

NOTE: Gas flow and burner ignition are among the first things that should be inspected.

Please *See Page 19, Section 7.4* for suggested items to inspect.

7.5 Maintenance Checklist

Installation Code and Annual Inspections:
All installation and service of ROBERTS GORDON® equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Roberts-Gordon LLC and conform to all requirements set forth in the ROBERTS GORDON® manuals and all applicable governmental authorities pertaining to the installation, service, operation and labeling of the equipment.

To help facilitate optimum performance and safety, Roberts-Gordon LLC recommends that a qualified contractor conduct, at a minimum, annual inspections of your ROBERTS GORDON® equipment and perform service where necessary, using only replacement parts sold and supplied by Roberts-Gordon LLC.

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	Maintain the clearances to combustibles.
	Do not hang anything from, or place anything on, the heater.
	Make sure nothing is lodged underneath the reflector, in between the tubes or in the decorative or protective grilles (included with select models).
	Immediately remove objects in violation of the clearances to combustibles.
Reflector	Support reflector with reflector hanger and support strap.
	Reflector must not touch tube.
	Make sure there is no dirt, sagging, cracking or distortion.
	Do not operate if there is sagging, cracking or distortion.
	Make sure reflectors are correctly overlapped.
	Clean outside surface with a damp cloth.
Vent Pipe	Venting must be intact. Using a flashlight, look for obstructions, cracks on the pipe, gaps in the sealed areas or corrosion.
	The area must be free of dirt and dust.
	Remove any carbon deposits or scale using a wire brush.
Outside Air Inlet	Inlet must be intact. Look for obstructions, cracks on the pipe, gaps in the sealed areas or corrosion.
	The area must be free of dirt and dust. Clean and reinstall as required.
Tubes	Make sure there are no cracks.
	Make sure tubes are connected and suspended securely.
	Make sure there is no sagging, bending or distortion. Clean or replace as required.
Gas Line	Check for gas leaks.

Burner Observation Window	Make sure it is clean and free of cracks or holes. Clean and replace as required.
Blower Scroll, Wheel and Motor	Compressed air or a vacuum cleaner may be used to clean dust and dirt.
Burner Cup and Orifice	Clear of obstructions (even spider webs will cause problems). Carefully remove any dust and debris from the burner.
Electrode	Replace if there are cracked ceramics, excessive carbon residue, or erosion of the electrode. The electrode gap should be 1/8" (3.2 mm).
Thermostat	There should be no exposed wire or damage to the thermostat.
Suspension Points	Make sure the heater is hanging securely. Look for signs of wear on the chain or ceiling.
Decorative and Protective Grille (optional)	The grille must be securely attached. Check that the side reflector extensions are installed correctly and secured in place if necessary. (Decorative grille only.) Make sure shield is installed correctly and secured in place if necessary. (Decorative grille only.)
Lower Clearance Shield (optional)	The lower shield must be securely attached. Inspect shield support straps and lower clearance shield anchor points. Make sure shield is installed correctly and secured in place if necessary.
Wall Tag	If wall tag is present, make sure it is legible and accurate. Please contact Roberts-Gordon LLC or your ROBERTS GORDON® independent distributor, if you need a wall tag.
Safety Labels	Product safety signs or labels should be replaced by the product user when they are no longer legible. Please contact Roberts-Gordon LLC or your ROBERTS GORDON® independent distributor to obtain replacement signs or labels.

SECTION 8: THE ROBERTS GORDON® GORDONRAY® BH WARRANTY

ROBERTS-GORDON LLC WILL PAY FOR:

Within 36 months from date of purchase by buyer or 42 months from date of shipment by Roberts-Gordon LLC (whichever occurs first), replacement parts will be provided free of charge for any part of the product which fails due to a manufacturing or material defect.

Roberts-Gordon LLC will require the part in question to be returned to the factory. Roberts-Gordon LLC will, at its sole discretion, repair or replace after determining the nature of the defect and disposition of part in question.

ROBERTS GORDON® Replacement Parts are warranted for a period of 12 months from date of shipment from Roberts-Gordon LLC or the remaining ROBERTS GORDON® GORDONRAY® BH warranty.

ROBERTS-GORDON LLC WILL NOT PAY FOR:

Service trips, service calls and labor charges.

Shipment of replacement parts.

Claims where the total price of the goods have not been paid.

Damage due to:

- Improper installation, operation or maintenance.
- Misuse, abuse, neglect, or modification of the ROBERTS GORDON® GORDONRAY® BH in any way.
- Use of the ROBERTS GORDON® GORDONRAY® BH for other than its intended purpose.
- Incorrect gas or electrical supply, accident, fire, floods, acts of God, war, terrorism, or other casualty.
- Improper service, use of replacement parts or accessories not specified by Roberts-Gordon.
- Failure to install or maintain the ROBERTS GORDON® GORDONRAY® BH as directed in the Installation, Operation and Service Manual.
- Relocation of the ROBERTS GORDON® GORDONRAY® BH after initial installation
- Use of the ROBERTS GORDON® GORDONRAY® BH in a corrosive atmosphere containing contaminants.
- Use of the ROBERTS GORDON® GORDONRAY® BH in the vicinity of a combustible or explosive material.
- Any defect in the ROBERTS GORDON® GORDONRAY® BH arising from a drawing, design, or specification supplied by or on behalf of the consumer.
- Damage incurred during shipment. Claim must be filed with carrier.

WARRANTY IS VOID IF:

The ROBERTS GORDON® GORDONRAY® BH is not installed by an 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 ownership of the ROBERTS GORDON® GORDONRAY® BH is moved or transferred. This warranty is non-transferable.

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

READ YOUR INSTALLATION, OPERATION AND SERVICE MANUAL.

If you have questions about your equipment, contact your installing professional. Should you need Replacement Parts or have additional questions, call or write:

Roberts-Gordon LLC
1250 William Street
P.O. Box 44
Buffalo, New York 14240-0044
Telephone: +1.716.852.4400
Fax: +1.716.852.0854
Toll Free: 800.828.7450
www.rg-inc.com
www.radiantheaters.com

Roberts-Gordon LLC'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 LLC 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® GORDONRAY® BH**.** 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 LLC 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 war, fire, flood, strike, government or court orders, acts of God, terrorism, unavailability of supplies, parts or power. No person is authorized to assume for Roberts-Gordon LLC any other warranty, obligation or liability.

LIMITATIONS ON AUTHORITY OF REPRESENTATIVES:

No representative of Roberts-Gordon LLC, 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 LLC's duly authorized Executive Officer.

ROBERTS GORDON
Infrared Heating

OWNER WARRANTY REGISTRATION CARD

Mail or Fax to:

Roberts Gordon LLC •1250 William Street, P.O. Box 44 • Buffalo, NY 14240-0044 • Phone: 716-852-4400 • Fax: 716-852-0854
Toll Free: 800-828-7450 • www.rg-inc.com

About the Owner:

Name:_____

Address:_____City:_____State:_____Zip Code:_____

Phone:_____ Fax:_____ E-mail:_____

About the Installer:

Name:_____

Address:_____City:_____State:_____Zip Code:_____

Phone:_____Fax:_____E-mail:_____

Purchased From (if different than installer):

Name:_____

Address:_____City:_____State:_____Zip Code:_____

Phone:_____ Fax:_____ E-mail:_____

About your Heater:

Model#:_____ Serial #:_____ Fuel:_____Installation Date:_____

Type of Installation (check one):

o Automotive	o Manufacturing	o Warehouse	o Recreational	o Aircraft
o Public Building	o Office	o Retail	o Agricultural	o Other_____

Installation Code and Annual Inspections: All installation and service of ROBERTS GORDON® equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Roberts-Gordon LLC and conform to all requirements set forth in the ROBERTS GORDON® manuals and all applicable governmental authorities pertaining to the installation, service, operation and labeling of the equipment.

To help facilitate optimum performance and safety, Roberts-Gordon LLC recommends that a qualified contractor conduct, at a minimum, annual inspections of your ROBERTS GORDON® equipment and perform service where necessary, using only replacement parts sold and supplied by Roberts-Gordon LLC.

These products are not for residential use.

This product is intended to assist licensed professionals in the exercise of their professional judgment.

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Attach this information to a wall near the ROBERTS GORDON® heater.

ROBERTS GORDON®
Infrared Heating

Read the Installation, Operation, and Service Manual thoroughly before installation, operation, or service.

Know your model number and installed configuration.

Model number and installed configuration are found on the burner and in the Installation, Operation and Service Manual.

Write the largest clearance dimensions with permanent ink according to your model number and configuration in the open spaces below.

OPERATING INSTRUCTIONS

1. STOP! Read all safety instructions on this information sheet.
2. Open the manual gas valve in the heater supply line.
3. Turn on electric power to the heater.
4. Set the thermostat to desired setting.

TO TURN OFF THE HEATER

1. Set the thermostat to off or the lowest setting.

IF THE HEATER WILL NOT OPERATE, TO ENSURE YOUR SAFETY, FOLLOW THESE INSTRUCTIONS TO SHUT DOWN YOUR HEATER

1. Set the thermostat to off or the lowest setting.
2. Turn off electric power to the heater.
3. Turn off the manual gas valve in the heater supply line.
4. Call your registered installer/contractor qualified in the installation and service of gas-fired heating equipment.

⚠WARNING

Fire Hazard

Keep all flammable objects, liquids and vapors the minimum required clearances to combustibles away from heater.

Some objects will catch fire or explode when placed close to heater.

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

Maintain_____clearance to the side and _____ clearance below the heater from vehicles and combustible materials.

Roberts-Gordon LLC
1250 William Street
P.O. Box 44
Buffalo, NY 14240-0044 USA
Telephone: +1.716.852.4400
Fax: +1.716.852.0854
Toll Free: 800.828.7450

Roberts-Gordon Europe Limited
Unit A, Kings Hill Business Park
Darlaston Road, Wednesbury
West Midlands WS10 7SH UK
Telephone: +44 (0)121 506 7700
Fax: +44 (0)121 506 7701

Service Telephone: +44 (0)121 506 7709
Service Fax: +44 (0)121 506 7702
E-mail: uksales@rg-inc.com
E-mail: export@rg-inc.com

Installation Code and Annual Inspections:
All installation and service of ROBERTS GORDON® equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Roberts-Gordon and conform to all requirements set forth in the ROBERTS GORDON® manuals and all applicable governmental authorities pertaining to the installation, service, operation and labeling of the equipment. To help facilitate optimum performance and safety, Roberts-Gordon recommends that a qualified contractor conduct, at a minimum, annual inspections of your ROBERTS GORDON® equipment and perform service where necessary, using only replacement parts sold and supplied by Roberts-Gordon.

Further Information: Applications, engineering and detailed guidance on systems design, installation and equipment performance is available through ROBERTS GORDON® representatives. Please contact us for any further information you may require, including the Installation, Operation and Service Manual.

This product is not for residential use.

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