

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.

Vantage® EV

**EV-80
EV-110
EV-140
EV-170
EV-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 to provide your serviceman with information should it become necessary.



Quality in Any Language™

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P/N 251100NA Rev. A 07/03

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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.

Thin sheet metal parts, such as the 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 local distribution conditions, nature of gas and pressure, and adjustment of the appliance are compatible.

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

⚠ WARNING**Explosion Hazard**

Turn off gas supply to heater before service or maintenance.

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

⚠ WARNING**Electrical Shock Hazard**

Disconnect electrical power before service or maintenance.

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

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 ladder or other access equipment and never hang or suspend anything from heater.
- To safely and adequately install heater using materials with a minimal working load of 75 lbs. (33 kg).
- To ensure there is adequate air circulation around the heater and to supply air for combustion, ventilation and distribution in accordance with local codes.

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® BZC 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. See Page 13, Figure 11 through Page 14, Figure 16. 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
<p>Do not use heater in an area containing corrosive chemicals.</p> <p>Avoid the use of corrosive chemicals to ensure a longer life of the burner, tubing and other parts.</p> <p>Failure to follow these instructions can result in property damage.</p>

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.

In Canada, the conversion shall be carried out in accordance with the requirements of the provincial authorities having jurisdiction and in accordance with the requirements of the CAN1-B149.1 and .2 installation codes.

SECTION 3: FOR NATURAL TO PROPANE CONVERSIONS ONLY**FIGURE 1: Conversion Kit Regulator Installation in Valve (Natural to Propane)**

This appliance has been converted to _____ fuel.

Orifice: _____

Manifold Pressure: _____

Input: _____

Cet appareil a ete converti au: _____

Injecteur: _____

Pression a la tubulure d'alimentation: _____

Debit calorifique: _____

© ROBERTS GORDON Printed in the U.S.A./Imprimé aux Etats-Unis P/N 91039400

Gas Conversion Label: P/N 91039400

⚠ WARNING

Fire Hazard

Check conversion kit part number before proceeding.

Kit part number must match the corresponding model number.

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

Orifice: P/N (see Table below)

Spring Kit: P/N 90032600

Cap Screw (black)

O Ring (black)

Pressure Regulator Adjusting Screw (white)

Spring (red)

Pressure Regulator Housing

3.1 Contents of Fuel Conversion Kits (Natural to Propane)

All kits include this manual (P/N 251100NA) and the VANTAGE® EV Installation, Operation and Service Manual (P/N 151100NA).

Kit Number	Model	Orifice P/N	Label	Spring Kit
EV080NP	EV-80	91910439	91939400	90032600
EV110NP	EV-110	91910431	91939400	90032600
EV140NP	EV-140	91910429	91939400	90032600
EV170NP	EV-170	91910428	91939400	90032600
EV200NP	EV-200	91910422	91939400	90032600

SECTION 4: FOR PROPANE TO NATURAL CONVERSIONS ONLY

FIGURE 2: Conversion Kit Regulator Installation in Valve (Propane to Natural)

This appliance has been converted to _____ fuel.
 Orifice: _____
 Manifold Pressure: _____
 Input: _____

Cet appareil a été converti au: _____
 Injecteur: _____
 Pression à la tubulure d'alimentation: _____
 Débit calorifique: _____

©ROBERTSGORDON Printed in the U.S.A./Imprimé aux États-Unis P/N 91039400

Gas Conversion Label: P/N 91039400



Orifice: P/N (see Table below)

⚠ WARNING

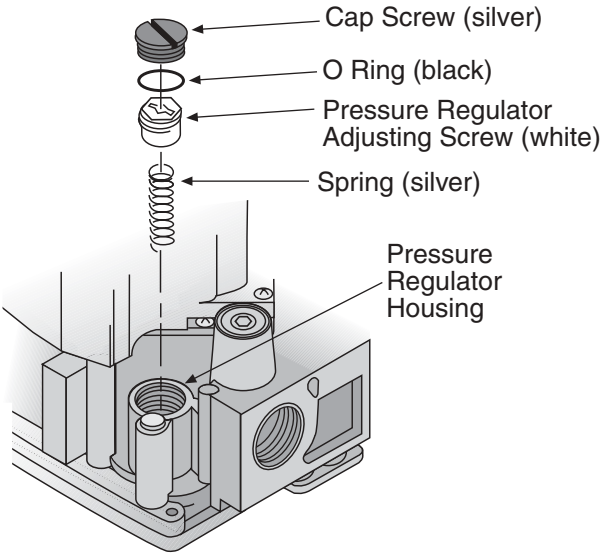
Fire Hazard

Check conversion kit part number before proceeding.

Kit part number must match the corresponding model number.

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

Spring Kit: P/N 90032700

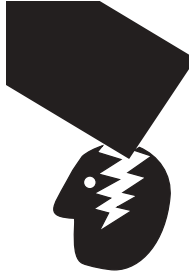


4.1 Contents of Fuel Conversion Kits (Propane to Natural)

All kits include this manual (P/N 251100NA) and the VANTAGE® EV Installation, Operation and Service Manual (P/N 151100NA).

Kit Number	Model	Orifice P/N	Label	Spring Kit
EV080PN	EV-80	91910423	91939400	90032700
EV110PN	EV-110	91910414	91939400	90032700
EV140PN	EV-140	91910405	91939400	90032700
EV170PN	EV-170	91910401	91939400	90032700
EV200PN	EV-200	91910495	91939400	90032700

SECTION 5: FUEL CONVERSION INSTRUCTIONS

⚠ WARNING	
	Suspension Hazard
	Burner is secured to burner tube by bolts and lockwashers.
	Upon removal of bolts, burner is free from burner tube and will fall if not supported.
Failure to follow these instructions can result in death, injury or property damage.	

NOTE: In order to convert the EV-Series heater for alternate gas, you must access both sides of the burner. 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 (4) bolts which hold the burner on the transition tube using a 1/2" wrench.
6. Remove the burner. See Page 5, Figure 3.
7. Save the gasket (P/N 02568200) or re-install a new one after conversion.

Step 5.2 Door Assembly Removal

Remove thumb screws (2) and set aside. See Page 6, Figure 4.

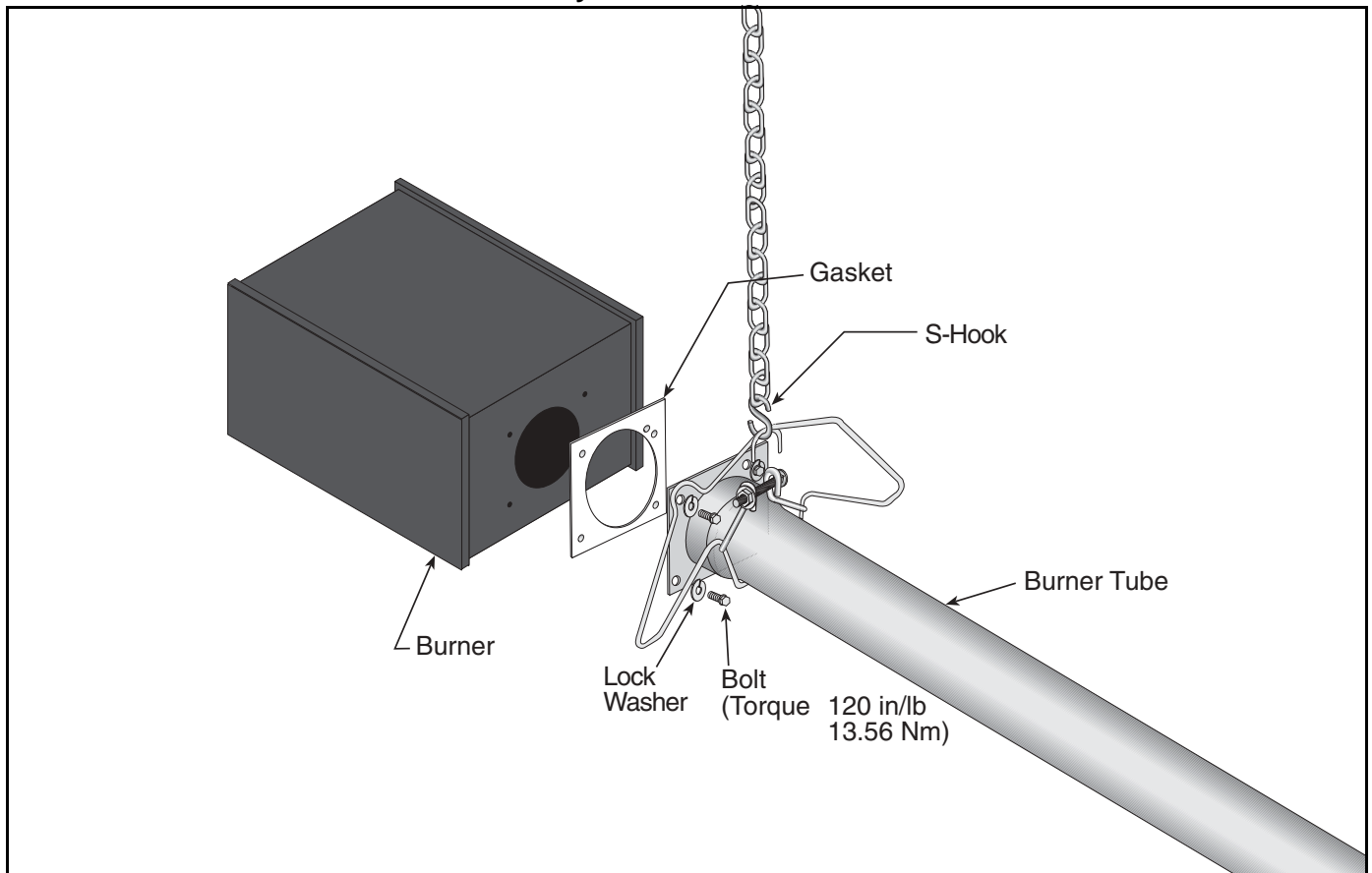
FIGURE 3: VANTAGE® EV Burner Assembly Overview

FIGURE 4: Burner (external view from below)

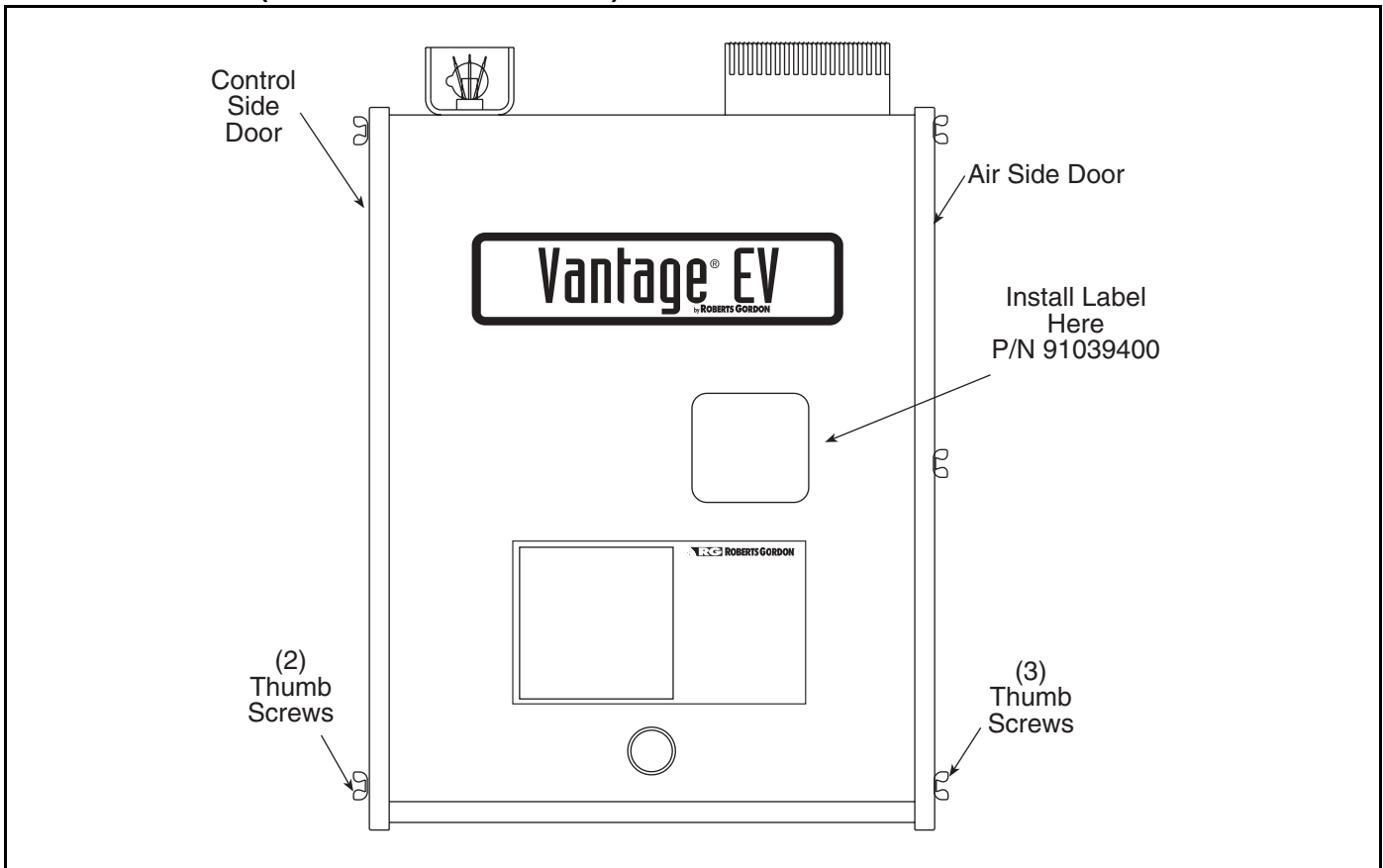
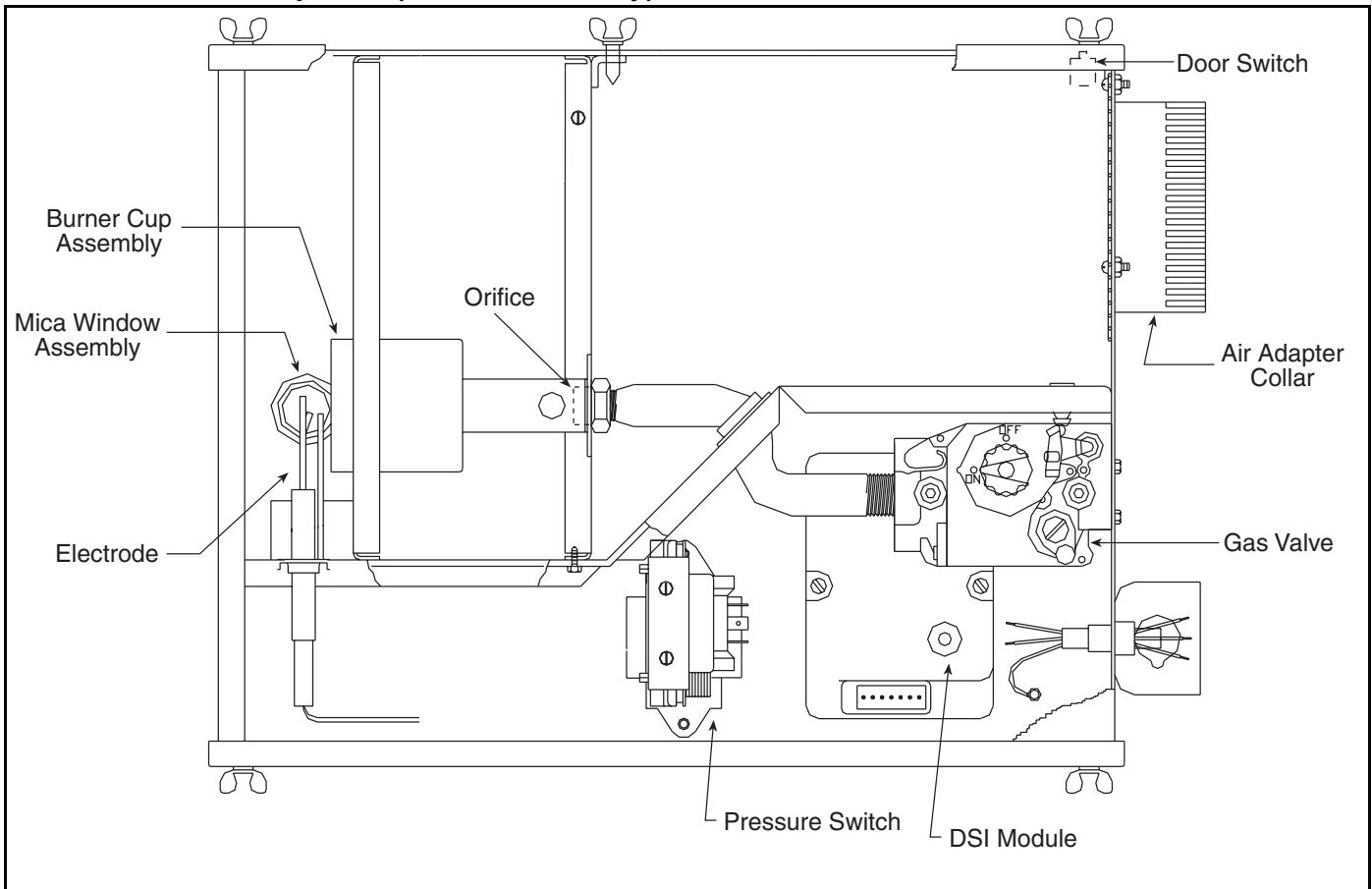


FIGURE 5: Burner, Top View (internal assembly)

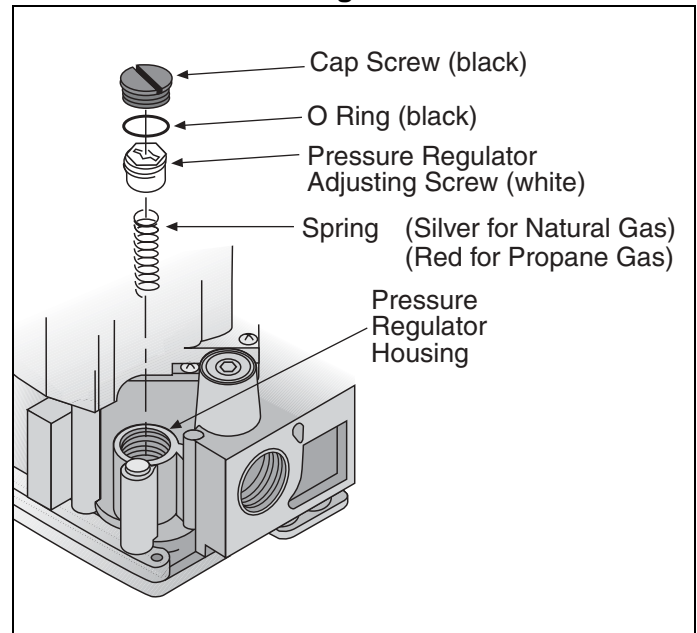


Step 5.3 Burner Cup Assembly Removal

1. Remove the electrode: Remove the electrode with a 1/4" nutdriver or phillips (+) screwdriver.
2. Remove the air side door. Remove the three thumb screws and set the door aside. See Page 6, Figure 4.
3. Remove the burner cup. Unscrew the burner cup and set aside. See Page 6, Figure 5.
4. 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 ROBERTS GORDON® independent distributor for more details.

Step 5.4 Regulator 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 air side door.
4. Replace the electrode.
5. See Page 7, Figure 6.
6. 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.
7. NOTE: Silver spring for Natural, red spring for Propane.
8. See Page 3, Section 3 and Page 4, Section 4 to verify spring kit components.
9. Replace the adjusting screw and turn down approximately 1/2".

FIGURE 6: Pressure Regulator**⚠ WARNING**

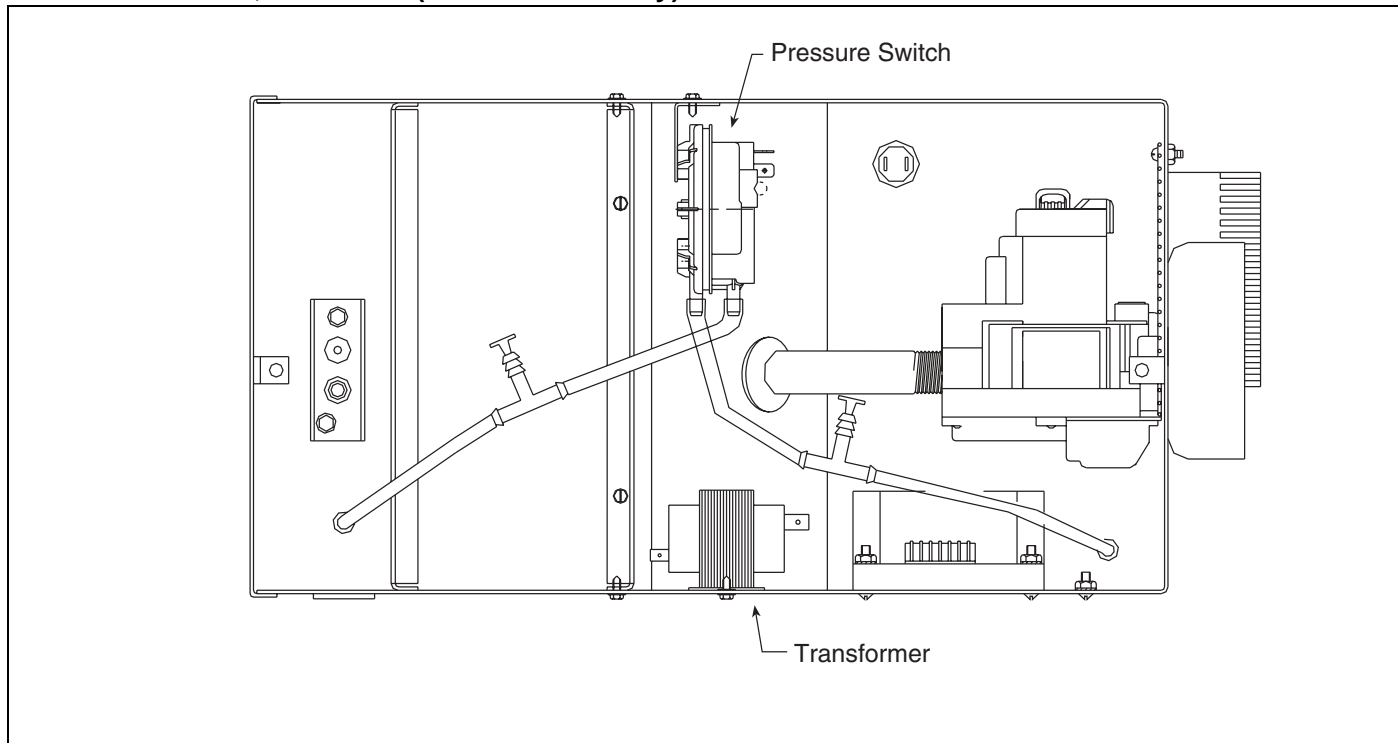
Bolts must be torqued to 120 in/lbs as shown below to secure burner tube to burner.

Burner tube will separate from burner if not torqued properly.

Locate first hangers no more than 4" (10cm) from the burner.

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

10. 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 VANTAGE® EV Installation, Operation and Service Manual (P/N 151100NA) included in this Conversion Kit.

FIGURE 7: 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 9, Figure 8*.

NOTE: Insure differential box pressure is 0.5" to 0.6" hot per Section 12 of the VANTAGE® EV Installation, Operation and Service Manual (P/N 151100NA). See *Page 10, Figure 9*.

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" w.c.**
 - Propane: 10.5" w.c.**
4. Turn off power and gas.
5. Remove test tap and replace plug at the 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 9, Figure 8*.
4. Turn on gas supply to heater.
5. The manometer should read a maximum gas pressure of 14.0" w.c. 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" w.c. for Natural gas or 11.0" w.c. 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 8: Manometer Reading

⚠ WARNING	
	Electrical Shock Hazard
	Disconnect electrical power before installation or service.
	Failure to follow these instructions can result in death, injury or property damage.

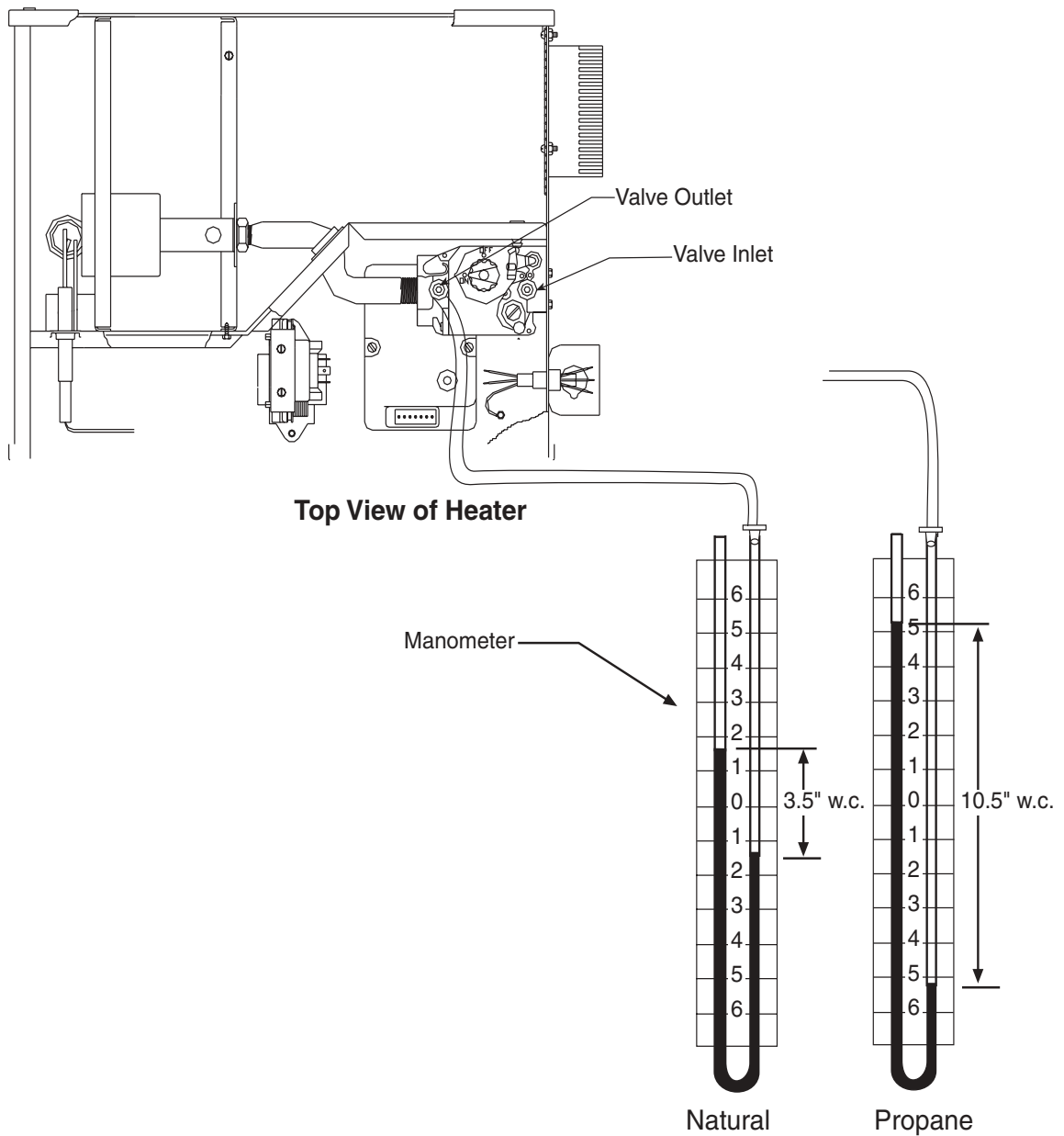



FIGURE 9: Manometer Reading (Differential Reading)

⚠ WARNING	
	Electrical Shock Hazard
	Disconnect electrical power before installation or service.
	Failure to follow these instructions can result in death, injury or property damage.

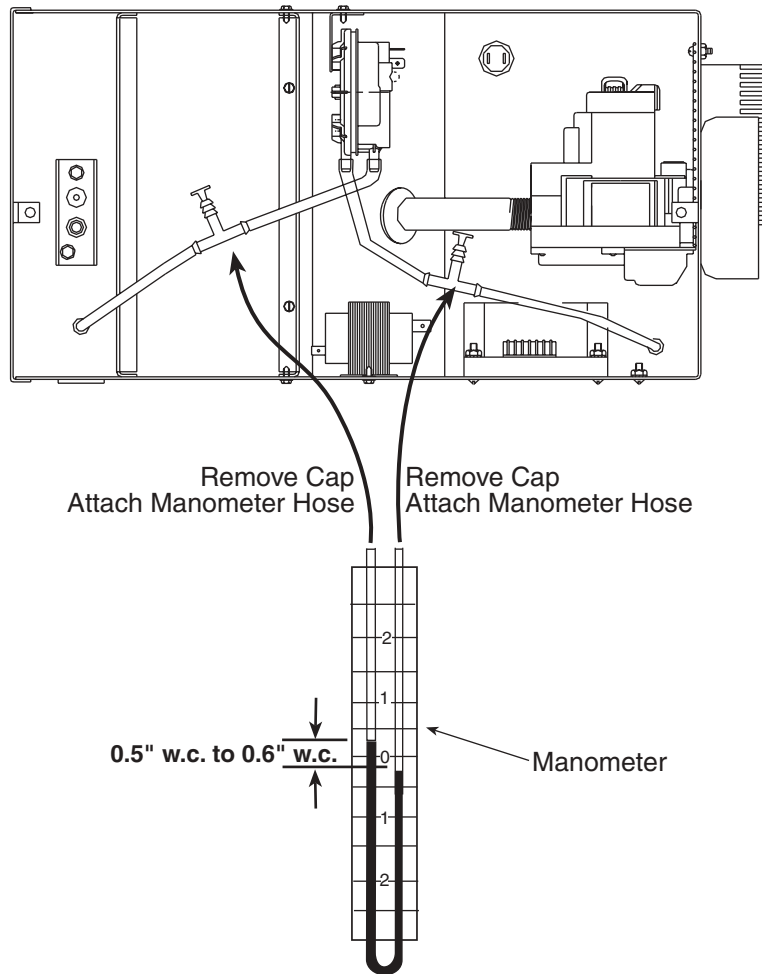


FIGURE 10: Label P/N 91039400

Enter Data for Natural to Propane Conversions		Enter Data for Propane to Natural Conversions	
Model	Propane Orifice Size	Model	Natural Orifice Size
EV-80	#39	EV-80	#23
EV-110	#31	EV-110	#14
EV-140	#29	EV-140	#5
EV-170	#28	EV-170	5.8 mm
EV-200	#22	EV-200	"E"

Propane → This appliance has been converted to _____ fuel. ← Natural

Orifice: _____ ←

10.5" w.c. → Manifold Pressure: _____ ← 3.5" w.c.

From Serial Plate → Input: _____ ← From Serial Plate

Cet appareil a ete converti au: _____

Injecteur: _____

Pression a la tubulure d'alimentation: _____

Debit calorifique: _____

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Step 5.7 Burner Conversion Label Information

Print the requested information in the fields of the burner conversion label as shown in *See Page 11, Figure 10.*

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 6, Figure 4.*
2. Replace the burner housing top.

SECTION 6: CRITICAL CONSIDERATIONS

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, which 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 13, Figure 11 through Page 14, Figure 16* 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.
- Maintain clearances from heat sensitive material, 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, 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 in the heater's Installation, Operation and Service manual.
- 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

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

Keep all flammable objects, liquids and vapors the required clearances to combustibles away from 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. "-" indicates an unapproved application. Roberts-Gordon prohibits the installation of this heater for all unapproved applications.

FIGURE 11: STANDARD REFLECTOR

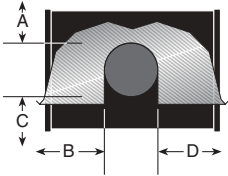
	Model	(inches)				(centimeters)			
		A	B	C	D	A	B	C	D
	EV-80	6	38	66	38	16	97	168	97
	EV-110	6	38	66	38	16	97	168	97
	EV-140	6	41	69	41	16	105	176	105
	EV-170	6	44	76	44	16	112	194	112
	EV-200	8	49	81	49	21	125	206	125
	20' Downstream All models	6	22	43	22	16	56	110	56

FIGURE 12: ONE SIDE REFLECTOR

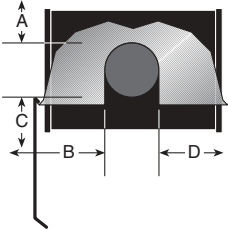
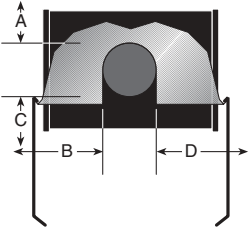
	Model	(inches)				(centimeters)			
		A	B	C	D	A	B	C	D
	EV-80	6	9	72	56	16	23	183	143
	EV-110	6	9	72	56	16	23	183	143
	EV-140	6	9	74	61	16	23	188	155
	EV-170	6	9	79	63	16	23	201	161
	EV-200	8	9	85	69	21	23	216	176
	20' Downstream All models	6	9	46	39	16	23	117	100

FIGURE 13: TWO SIDE REFLECTORS

	Model	(inches)				(centimeters)			
		A	B	C	D	A	B	C	D
	EV-80	6	27	73	27	16	69	186	69
	EV-110	6	27	73	27	16	69	186	69
	EV-140	6	30	76	30	16	77	194	77
	EV-170	6	34	83	34	16	87	211	87
	EV-200	8	35	90	35	21	89	229	89
	20' Downstream All models	6	14	51	14	16	36	130	36

- NOTE:** 1. All dimensions are from the surfaces of all tubes, couplings and elbows.
 2. “-” indicates an unapproved application. Roberts-Gordon prohibits the installation of this heater for all unapproved applications.

FIGURE 14: 45° TILT REFLECTOR

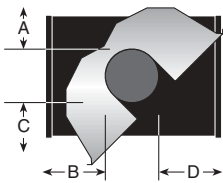
	Model	(inches)				(centimeters)			
		A	B	C	D	A	B	C	D
	EV-80	10	8	62	64	26	21	158	163
	EV-110	10	8	62	64	26	21	158	163
	EV-140	10	8	66	70	26	21	168	178
	EV-170	10	8	72	72	26	21	183	183
	EV-200	12	8	74	79	31	21	188	201
	20' Downstream All models	10	8	38	38	26	21	97	97

FIGURE 15: 2-FOOT DECO GRILLE, 1-FOOT DECO GRILLE AND PROTECTIVE GRILLE

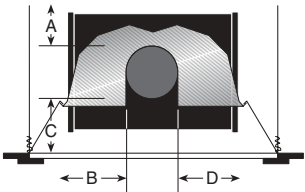
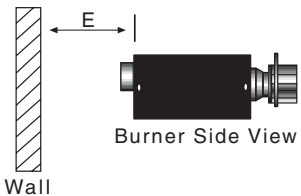
	Model	(inches)				(centimeters)			
		A	B	C	D	A	B	C	D
	EV-80	6	38	66	38	16	97	168	97
	EV-110	6	38	66	38	16	97	168	97
	EV-140	6	41	69	41	16	105	176	105
	EV-170	6	44	76	44	16	112	194	112
	EV-200	8	49	81	49	21	125	206	125
	20' Downstream All models	6	22	43	22	16	56	110	56

FIGURE 16: VENTING

	Model	(inches)	(centimeters)
		E	E
	EV-80	24	61
	EV-110	24	61
	EV-140	24	61
	EV-170	24	61
	EV-200	24	61

SECTION 7: OPERATION AND MAINTENANCE



The EV-Series series 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 pump will start immediately. After a small delay, the burners will begin their ignition sequence, 45 seconds later, sparking will begin at the electrode. Upon sparking of the electrodes, the gas valve is energized.
2. The flame will be sensed by the flame sensing rod and the electrode is de-energized.
3. If a flame is detected, the gas valve remains open. When the call for heat is satisfied, the burner shuts off. On EV-Series systems equipped with the optional ROBERTS GORDON® BZC Controllers or System Control, the pump will continue operation for a post-purge period of two minutes.
4. If no flame is detected, the gas valve is closed on the module and a purge period begins. After the purge, the module sparks, and there is a second trial for ignition. If flame is still not established, a third purge, and trial cycle begins. After 3 trials, the module will lockout until reset. Reset is accomplished by removing power from the module for at least 5 seconds (thermostat cycle required).

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.

Disconnect 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 are some of the areas requiring inspection.

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

Please see *Page 16, Section 7.5* for suggested items to inspect.

7.5 Maintenance Checklist

Installation, Service and Annual Inspection of the 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.

The Vicinity of the Heater	<p>Do not store or use flammable objects, liquids or vapors near the heater. Immediately remove these items if they are present.</p> <p><i>See Page 12, Section 6.</i></p>
Vehicles and Other Objects	<p>Maintain the clearances to combustibles.</p> <p>Do not hang anything from, or place anything on, the heater.</p> <p>Make sure nothing is lodged underneath the reflector, in between the tubes or in the decorative or protective grilles (included with select models).</p> <p>Immediately remove objects in violation of the clearances to combustibles.</p> <p><i>See Page 12, Section 6.</i></p>
Reflector	<p>Make sure there is no dirt, sagging, cracking or distortion.</p> <p>Do not operate if there is sagging, cracking or distortion.</p> <p>Make sure reflectors are correctly overlapped.</p> <p>Clean outside surface with a damp cloth.</p>
Vent Pipe	<p>Venting must be intact. Using a flashlight, look for obstructions, cracks on the pipe, gaps in the sealed areas or corrosion.</p> <p>The area must be free of dirt and dust.</p> <p>Clean and re-install as necessary.</p> <p>Remove any carbon deposits or scale using a wire brush.</p>
Outside Air Inlet	<p>Venting must be intact. Using a flashlight, look for obstructions, cracks on the pipe, gaps in the sealed areas or corrosion.</p> <p>The area must be free of dirt and dust.</p> <p>Remove any carbon deposits or scale using a wire brush.</p>
Tubes	<p>Make sure there are no cracks.</p> <p>Make sure tubes are connected and suspended securely.</p> <p>Make sure there is no sagging, bending or distortion.</p> <p>Clean or replace as required.</p>
Gas Line	<p>Check for gas leaks.</p>

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 vacuum cleaner may be used to clear 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.
Direct Spark Igniter/Sense Rod	Replace if there are cracked ceramics, excessive carbon residue, or erosion of the Direct Spark Igniter/Sense Rod.
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 side reflector extensions are installed correctly and secured in place if necessary Make sure shield is installed correctly and secured in place if necessary. (Decorative grille only.)
Pump	<p>With pump operating, check for excessive vibration or noise. Vibration is usually a sign that the impeller is out of balance. Turn off the system, insure power is shut off and remove the inlet plate. Check the shaft seal and replace if worn or missing.</p> <p>With the power off:</p> <p>Check the inlet and outlet of the pump for blockage or excessive soot and clean as necessary.</p> <p>Check boots for cracking or deterioration and replace if necessary.</p> <p>If a condensate trap is installed, check the condition of the trap and the drain line attached. Note: the condensate trap should be filled with water at the beginning of each heating season.</p> <p>Check the condition of the motor mounts. Lift the motor from the rear; and look for breaks in the rubber and replace if necessary.</p> <p>Check the condition and operation of the pressure switch.</p>

SECTION 8: THE ROBERTS GORDON® VANTAGE® EV 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® VANTAGE® EV 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® VANTAGE® EV as directed in Installation, Operation and Service Manual. You must follow requirements printed in this manual.

Misuse, abuse, neglect or modification of the ROBERTS GORDON® VANTAGE® EV 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® VANTAGE® EV after initial installation.

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

Use of the ROBERTS GORDON® VANTAGE® EV for other than its intended purpose.

Use of the ROBERTS GORDON® VANTAGE® EV in a corrosive atmosphere or any atmosphere containing contaminants.

Shipping. Claim must be filed with carrier.

Use of the ROBERTS GORDON® VANTAGE® EV in the vicinity of combustible or explosive materials.

Any defect in the ROBERTS GORDON® VANTAGE® EV 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® VANTAGE® EV 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® VANTAGE® EV is transferred. This warranty is nontransferable.

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

READ YOUR INSTALLATION, OPERATION AND SERVICE 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® VANTAGE® EV. 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.



U.S.A. OWNER WARRANTY REGISTRATION CARD

Mail or Fax to:

Roberts Gordon • 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):

- Automotive Manufacturing Warehouse Recreational Aircraft
- Public Building Office Retail Agricultural Other _____

CANADA OWNER WARRANTY REGISTRATION CARD

Mail or Fax to:

Roberts Gordon • 76 Main Street West, Unit 10 • Grimsby, ON L3M 1R6 • Phone: 905-945-5403 • Fax: 716-852-0854 • www.rg-inc.com

About the Owner:

Name: _____
Address: _____ City: _____ Prov.: _____ Postal Code: _____
Phone: _____ Fax: _____ E-mail: _____

About the Installer:

Name: _____
Address: _____ City: _____ Prov.: _____ Postal Code: _____
Phone: _____ Fax: _____ E-mail: _____

Purchased From (if different than installer):

Name: _____
Address: _____ City: _____ Prov.: _____ Postal Code: _____
Phone: _____ Fax: _____ E-mail: _____

About your Heater:

Model#: _____ Serial #: _____ Fuel: _____ Installation Date: _____

Type of Installation (check one):

- Automotive Manufacturing Warehouse Recreational Aircraft
- Public Building Office Retail Agricultural Other _____

Installation Code: ROBERTS GORDON® products are to be installed only in accordance with local laws, codes and regulations, and only by a contractor qualified in the installation and service of gas-fired heating equipment.
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Attach this information to a wall near the ROBERTS GORDON® heater.



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

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

Keep all flammable objects, liquids and vapors the required clearances to combustibles away from 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
1250 William Street
P.O. Box 44
Buffalo, NY 14240-0044 USA
Telephone: 716.852.4400
Fax: 716.852.0854
Toll Free: 800.828.7450

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76 Main Street West, Unit 10
Grimsby, Ontario L3M 1R6 Canada
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Roberts-Gordon
Oxford Street
Bilston, West Midlands WV14 7EG UK
Telephone: +44(0) 1902 494425
Fax: +44(0) 1902 403200

Service Telephone: +44(0) 1902 498733
Service Fax: +44(0) 1902 401464
E-mail: uksales@rg-inc.com
E-mail: export@rg-inc.com

Installation Code: ROBERTS GORDON® products are to be installed only in accordance with local laws, codes and regulations, and only by a contractor qualified in the installation and service of gas-fired heating equipment.

For optimum product performance and safety, installation, service and annual inspections must be completed by a contractor qualified in the installation and service of gas-fired heating equipment.

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