

### GA9150A REMOTE-READY VALVE/PILOT kit INSTRUCTION MANUAL For All Single, Dual and Triple Burner Natural and Propane/LP Gas Logs

A WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

A WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

# **INSTALLER:** Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.

The GA9150A Series Remote Ready On/Off Safety Valve/Pilot kit contains the following:

<ul> <li>Pri</li> <li>Pii</li> <li>Pii</li> <li>Sti</li> <li>Pii</li> <li>Na</li> </ul>	V Valve ropane/LP Conversion Regulator lot Burner (with natural gas orifice) lezo Ignitor Electrode teel Shroud - Pilot Kit lezo Ignitor Cover atural Gas Brass Orifice atural Gas Brass Orifice	901073-01 901072-01 106823-01 106824-01 901064-03 901064-04	• • • • •	Propane/LP Conversion Decal Screw #10-32 x 1/4" 18" Propane/LP Brass Orifice 24" Propane/LP Brass Orifice 30" Propane/LP Brass Air Mixer Propane/LP Pilot Burner Orifice Screws 1/4" #8 "B" pt (6 ea.) Refractory Remote Control 4". Jumper Wire	901691-01 11107 901065-02 901065-03 901065-04 901066-02 901070-01 901075-01 901837-01 14580
• Na	atural Gas Brass Orifice	901064-09	•	4" Jumper Wire	14580

# INSTALLATION

MODEL	DESCRIPTION	Btu/Hr Input Natural Gas	Btu/Hr Input Propane Gas	Minimum Vent Opening
CVSR18	18" Single Burner	50,000	40,000	8" dia.
CPVSR18	18" Single Burner	50,000	40,000	8" dia.
CVSR24	24" Single Burner	60,000	50,000	8" dia.
CPVSR24	24" Single Burner	60,000	50,000	8" dia.
CVDR18	18" Dual Burner	55,000	45,000	8" dia.
MD18	18" Dual Burner	55,000	45,000	8" dia.
CVDR24	24" Dual Burner	65,000	55,000	8" dia.
MD24	24" Dual Burner	65,000	55,000	8" dia.
CVDR30	30" Dual Burner	70,000	60,000	8" dia.
(C)BFL(T,R)	18" Triple Burner	65,000	55,000	8" dia.
(C)BFL(T,R)	24" Triple Burner	70,000	60,000	8" dia.

FUEL PRESSURE SPECIFICATIONS (W.C.)			
	Inlet	Manifold*	
NG	5.5"-10.5"	3.5"	
LP	11"-13"	10"	
* +			

' ± .2"

MINIMUM FIREBOX SIZES					
MODEL	FRONT WIDTH*	BACK WIDTH**	DEPTH	HEIGHT	
18DR/SR/MD	28"	16"	14"	18"	
24DR/SR/MD	29 <sup>3</sup> / <sub>4</sub> "	17"	15 <sup>1</sup> / <sub>2</sub> "	18"	
30DR	36"	27"	18"	18"	
BFL18	28"	16"	15 <sup>1</sup> / <sub>2</sub> "	18"	
BFL24	30"	22"	15 <sup>1</sup> / <sub>2</sub> "	18"	

\* Add 6" if valve/pilot is used \*\*At depth indicated

BURNER ORIFICE NATURAL **PROPANE/LP** LOG SIZE In. Num. CLR. In. Num. CLR. 18SR/DR/MD Green 0.073 0.129 30 49 Red 24SR/DR/MD/BFI 18 0 141 28 Yellow 0.086 44 Orange 30DR/BFL24 0.157 22 Yellow/ 0.089 43 Black Blue

Figure 1 - Technical Inf	ormation Charts
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#### CHECK GAS TYPE

You must install this Remote Ready Valve/ Pilot Kit if your gas type is propane/LP. For additional convenience and safety, this Remote Ready Valve/Pilot Kit can be used with natural gas. If you are unsure of the proper application, call dealer where you bought log set.

If the fireplace does not have a gas supply shutoff valve, one must be installed.

# CONNECTING TO GAS SUPPLY

WARNING: This appliance requires a 1/2" NPT (National Pipe Thread) inlet connection to the pressure regulator. WARNING: A qualified service person must connect log set to gas supply. Follow all local codes.

CAUTION: Never connect propane/LP appliance directly to the propane/LP supply. This appliance requires an external regulator (not supplied). Install the external regulator between the heater and propane/LP supply.

#### Installation Items Needed

Before installing log set, make sure you have the items listed below.

- piping (check local codes)
- sealant (resistant to propane/LP gas)
- · equipment shutoff valve\*
- test gauge connection\*
- adjustable (crescent) wrench or pliers
- · sediment trap
- tee joint
- · pipe wrench
- · flexible gas line

\* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA design-certified equipment shutoff valve from your dealer.

For propane/LP units, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11" and 14" of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 2, page 3. Pointing the vent down protects it from freezing rain or sleet.

WARNING: Never connect natural gas appliance to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to log set. If pipe is too small, undue loss of volume will occur. Installation must include an equipment shutoff valve, union and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from log set (see Figure 3, page 4).

*IMPORTANT*: Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance.

Check your building codes for any special requirements for locating equipment shutoff valve to appliance.

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in a clogged burner orifice.

# WARNING: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

We recommend that you install a sediment trap in supply line as shown in Figure 3, page 4. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and heater. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into log set controls. If sediment trap is not installed or is installed wrong, log set may not run properly.

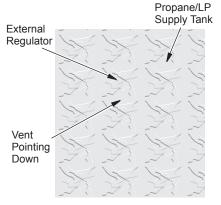


Figure 2 - External Regulator on Propane/LP Supply Tank with Vent Pointing Down

#### INSTALLATION Continued Approved Flexible Natural Gas Gas Hose (if allowed From Gas Meter by local codes) (5" W.C.\*\* to 10.5" W.C. Pressure) Propane/LP From External Regulator CSA Design-Certified (11" W.C.\*\* Equipment Shutoff Valve to 14" W.C. With 1/8" NPT Tap\* Pressure) 3" Minimum Tee Pipe Cap Joint Nipple Sediment Trap

Figure 3 - Gas Connection

\* Purchase the optional CSA design-certified equipment shutoff valve from your dealer.

\*\* Minimum inlet pressure for purpose of input adjustment.

# CHECKING GAS CONNECTIONS

WARNING: Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.

WARNING: Never use an open flame to check for a leak. Apply a noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

CAUTION: If using propane/ LP gas, make sure external regulator has been installed between propane/LP supply and appliance.

#### PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

# Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)

- Disconnect log set and its individual equipment shutoff valve from gas supply piping system.
- 2. Cap off open end of gas pipe where equipment shutoff valve was connected.
- Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas, or using compressed air.
- Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
- 5. Correct all leaks at once.
- Reconnect log set and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

# Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

- 1. Close equipment shutoff valve (see Figure 4).
- Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas, or using compressed air.
- Check all joints from gas meter for natural gas (see Figure 5, page 5) or propane/LP supply (see Figure 6, page 5) to equipment shutoff valve. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
- 4. Correct all leaks at once.

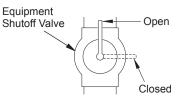


Figure 4 - Equipment Shutoff Valve

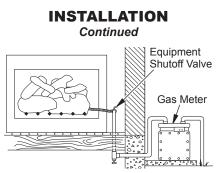


Figure 5 - Checking Gas Joints

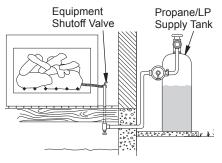


Figure 6 - Checking Gas Joints (Propane/ LP Gas Only)

#### GA9150A REMOTE READY VALVE/ PILOT KIT ASSEMBLY

#### Natural Gas Installation

- 1. Remove burner inlet fitting from burner manifold (see Figure 7).
- Use 10 mm socket to remove the orifice (see Figure 11, page 6). Replace with the proper orifice for your log set. See technical information charts in Figure 1 on page 2.
- Thread the gas control valve onto the burner inlet fitting (see Figure 7). Use thread sealant on the male threads of the burner inlet fitting. Hold the burner inlet fitting with a wrench to prevent overtightening the connection to the burner. Make sure the control knob is facing the front (see Figure 7).
- Replace burner inlet fitting into burner manifold (see Figure 7).
- Attach the pilot gas line to the pilot outlet of the gas control valve and tighten. Connect thermocouple wires to TP and TPTH terminals on gas valve terminal block. See Figure 8. Do not overtighten. If using propane/LP gas, see <u>Changing Pilot Orifice</u>, page 7.

- Install the inlet fitting into the inlet opening of the gas control valve (see Figure 9). Use thread sealant on the male pipe threads.
- Place the burner pan assembly in the center of the fireplace floor. Make sure the front of pan faces forward.

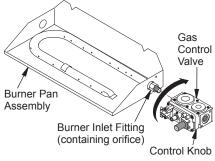
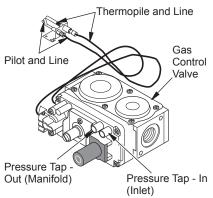
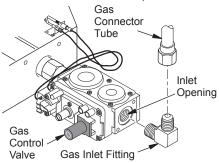


Figure 7 - Installing Gas Control Valve (Valve May Vary from Illustration)

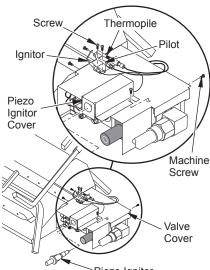


#### Figure 8 - Gas Control Valve with Thermocouple and Pilot (Valve May Vary from Illustration)

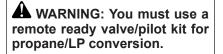




- Thread the gas supply adaptor to the fireplace gas supply pipe. Adjust to most convenient position.
- Install the gas connector tube to the gas supply adapter. Carefully shape tube and attach to gas inlet fitting (see Figure 9, page 5). Be careful not to cause kinks in tube.
- 10. Test for leaks following instructions in your hearth kit owner's manual under the section <u>Testing Burner for Leaks</u>.
- 11. Retighten and adjust the location of the gas control as necessary. The gas control should be level, with the control knob to the front.
- 12. Install cover to burner pan using screws provided.
- Install thermocouple, pilot, and piezo ignitor cover onto valve cover as shown in Figure 10. Use the provided screws.



Piezo Ignitor Figure 10 - Installing Thermocouple, Pilot, and Piezo Ignitor Cover (Valve May Vary from Illustration)

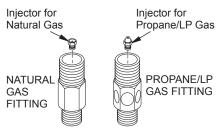


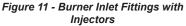
### PROPANE/LP GAS CONVERSION

To convert to propane/LP gas, the regulator pressure must be reset also the burner inlet fitting and pilot orifice must be replaced. The propane/ LP burner inlet fitting is supplied with the orifice installed for a 24" log set. If you have an 18" or 30" set, you must change this orifice also.

#### **Burner Inlet Fitting**

- Remove the burner inlet fitting from the burner pan assembly. DO NOT remove the orifice from this fitting. The propane/ LP burner inlet fitting is included in the hardware kit (see Figure 11).
- Be sure to use the correct orifice for your appliance. The hardware kit included with this appliance contains three orifices with a cone-like shape. If you have an 18" set, the orifice for the burner inlet fitting is red; for a 30" set, it is black. If you have a 24" log set, the orifice is orange.
- 3. For an 18" or 30" set, use a 10 mm socket or nut driver to install the orifice from the propane/LP burner inlet fitting. Choose the correct orifice for your log set size and install using thread sealant.
- Using thread sealant (resistant to the action of propane/LP gas) on larger end of fitting, screw the burner inlet fitting through hole and into burner manifold. Tighten using a wrench.
- 5 . Follow steps 3 through 13 under <u>Natural</u> <u>Gas Installation</u>, page 5.





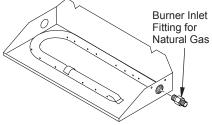


Figure 12 - Remove Burner Inlet Fitting

#### GAS CONTROL VALVE CONVERSION

Convert the gas control valve by changing out the valve regulator portion of the gas valve.

- Using a TORX T20 or slotted screwdriver, remove and discard the three mounting screws, pressure regulator tower and diaphragm/ spring components (see Figure 13).
- Insure that the rubber gasket is properly positioned on the new pressure regulator assembly. Install the new pressure regulator assembly to the valve using the new mounting screws supplied with the kit. Tighten screws securely (approximately 25 in-lbs.) See Figure 14.
- Install the identification label enclosed with the gas valve regulator to the valve body where it can easily be seen (see Figure 14).

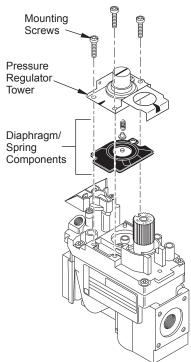
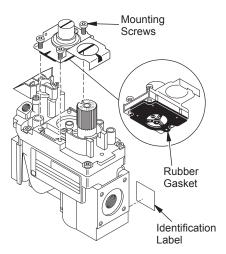


Figure 13 - Removing Mounting Screws, Pressure Regulator Tower and Diaphragm/Spring Components

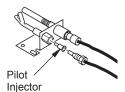


#### Figure 14 - Installing Pressure Regulator Assembly

#### **Changing Pilot Orifice**

The pilot is provided with a natural gas orifice installed. For propane/LP gas you must remove it and replace it with an propane/LP orifice. The hardware kit contains an propane/ LP orifice with a red stripe for converting the pilot.

- 1. Gently loosen and remove the pilot line connection from the bracket (see Figure 15).
- Replace the injector (see Figure 15) with the propane/LP pilot injector with the red stripe.
- 3. Replace and tighten the pilot line to the bracket.
- Continue with step 6 under <u>Natural Gas</u> <u>Installation</u>, page 5.



#### Figure 15 - Installing Propane/LP Pilot Orifice

Note: Follow the instructions in your hearth kit owner's manual under the section, <u>Testing</u> <u>Burner for Leaks</u>.

#### **Pilot Flow Adjustment**

If pilot flow is weak adjustments can be made with the pilot adjustment screw. The screw is located below the wire harness on gas valve body (see Figure 14).

#### REMOTE CONTROL OPTION HRC100

If you are using the HRC100 remote control option, you must first connect the leads of the receiver to the terminal block on the gas control (see Figure 16).

- 1. Connect the leads to the male fast-on terminals marked TH and TPTH.
- 2. Install a 9V battery (refer to the instructions included with the HRC100).
- 3. Install a 9V battery into the hand held transmitter.
- Insert the receiver into the simulated log control cover, with the raised cylinder fitting into the hole in the cover.
- 5. The cover may be moved aside when operation of the gas control is necessary.

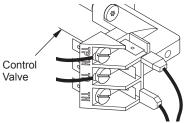


Figure 16 - Connecting Wire Terminals

#### No Optional Accessories

If you choose no remote accessories at this time, the provided jumper wire must be installed to the terminal block on the gas control. Connect the lead to the fast-on terminals marked TH and TPTH (see Figure 16).

# **OPERATION**

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
  - WHAT TO DO IF YOU SMELL GAS
  - Do not try to light any appliance.
  - Do not touch any electric switch; do not use any phone in your 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.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### LIGHTING INSTRUCTIONS

- 1. STOP! Read the safety information above.
- Make sure equipment shutoff valve is fully open.
- 3. Set selector switch to the OFF position.

WARNING: Burner will come on automatically within one minute when the selector switch is in the ON position after the pilot is lit.

# OPERATION Continued

- 4. Press in and turn control knob clockwise to the OFF position.
- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information. If you don't smell gas, go to the next step.
- Press in and turn control knob counterclockwise / to the PILOT position. Press in control knob for five (5) seconds (see Figure 17).

Note: You may be running this log set for the first time after hooking up to gas supply. If so, the control knob may need to be pressed in for 30 seconds or more. This will allow air to bleed from the gas system.

 With control knob pressed in, press and release ignitor button. This will light pilot. If needed, keep pressing ignitor button until pilot lights.

Note: If pilot does not stay lit, contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see <u>Manual Lighting Procedure</u>.

- Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
  - If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

Note: If pilot goes out, repeat steps 4 through 8.

- Slightly push in and turn control knob counterclockwise 
   to the ON position.
- 10. Wait one minute and switch selector switch to the ON position to light burner.
- Turn control knob clockwise to the PILOT position, or set selector switch in the OFF position.

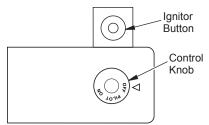


Figure 17 - Control Knob and Ignitor Button Location (Shown as Supplied, No Control Options)

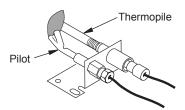


Figure 18 - Thermopile and Pilot

# TO TURN OFF GAS TO APPLIANCE

#### **Shutting Off Appliance**

- 1. Turn control knob clockwise to the OFF position.
- If Using Optional Hand-Held Remote: Set selector switch in the OFF position to prevent draining battery.
- 3. Turn off all electrical power to appliance if service is to be performed.

#### MANUAL LIGHTING PROCEDURE

- 1. Follow steps 1 through 6 under *Lighting Instructions*, starting on page 8.
- Depress control knob and light pilot with match.
- Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow steps 9 and 10, under <u>Lighting Instructions</u>, column 1.

# OPERATION

Continued



Note: All remote control accessories must be purchased separately. Follow instructions included with the remote control.

#### NOTICE: You must light the pilot before using the hand-held remote control unit. See <u>Lighting</u> <u>Instructions</u>, page 8.

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Slide the selector switch to the REMOTE position.

Note: The burner may light if hand-held remote was on when selector switch was last turned off. You can now turn the burner on and off with the hand-held remote control unit.

*IMPORTANT*: Do not leave the selector switch in the REMOTE or ON position when the pilot is not lit. This will drain the battery.

### **ON/OFF SERIES (MODEL HRC100)**

Hold the control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off.

TO LOCK press both buttons on hand-held remote control until light stops flashing. Handheld remote control is now locked. If the fire is on it will be turned off automatically. In the locked state, the light will not light up when any button is pressed.

TO UNLOCK press both buttons together on hand-held remote control until the light stops flashing. The hand-held remote is now unlocked.

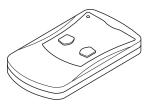


Figure 19 - On/Off Hand-Held Remote Control unit HRC100

# NOTES

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# WARRANTY

#### **KEEP THIS WARRANTY**

Model (located on product or identification tag)

Serial No. (located on product or identification tag)

Date Purchased

Keep receipt for warranty verification.

#### **DESA HEATING, LLC LIMITED WARRANTIES**

#### **New Products**

Standard Warranty: DESA Heating, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of one (1) year from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instructions.

For products purchased for commercial, industrial or rental usage, this warranty is limited to 90 days from the date of first purchase.

#### **Factory Reconditioned Products**

**Limited Warranty:** DESA Heating, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instructions.

#### Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contacting the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a DESA Heating, LLC Authorized Service Center or a provider approved by DESA Heating, LLC. Warranty parts must be obtained through authorized dealers of this product and/or DESA Heating, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or alteration(s).

This is DESA Heating, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal and limits the duration of any and all implied warranties, including warranties of merchantability and fitness for a particular purpose to one (1) year on new products and 30 days on factory reconditioned products from the date of first purchase. DESA Heating, LLC makes no other warranties regarding this product.

DESA Heating, LLC's liability is limited to the purchase price of the product, and DESA Heating, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above 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 state to state.

For information about this warranty contact:



NOT A UPC



DESA Heating, LLC 2701 Industrial Drive Bowling Green, KY 42101 www.desatech.com 1-866-672-6040

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