

# MODEL RVS304 ON/OFF

## REMOTE CONTROLLED SAFETY PILOT KIT

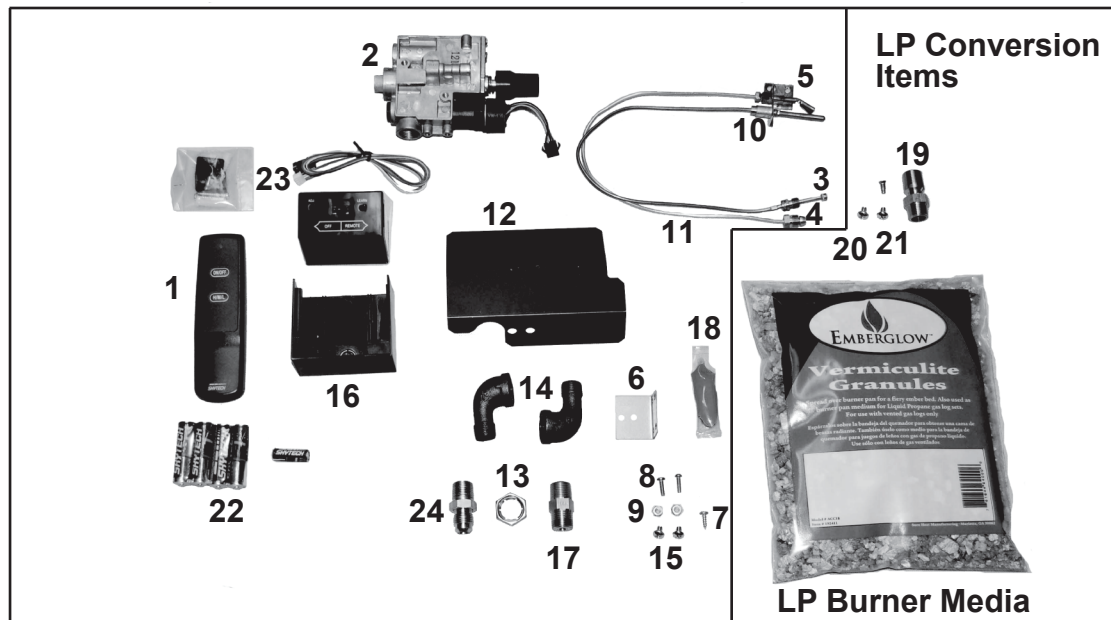
### Supplemental Installation Instructions for use with Natural Gas Log Sets

**NOTE:** This kit is for both Natural Gas and LP Gas applications. For LP (Propane) gas installation, see additional LP instructions packaged with necessary hardware.

**DO NOT USE THE NATURAL GAS ORIFICE SUPPLIED WITH YOUR KIT ON LP (PROPANE) GAS INSTALLATIONS! IMPROPER COMBUSTION WILL OCCUR!**

### IMPORTANT:

Read and follow ALL instructions carefully, as these supplemental Remote Controlled Pilot Assembly instructions are to be used in conjunction with the General Installation Instructions supplied with all Vented Natural Gas Log Sets.



### Illustrated Parts List

Part No.	Description	Part No.	Description	Part No.	Description
1	Remote Transmitter	9	Nut (2)	17	NG Orifice Holder
2	Gas Control Valve	10	Pilot Orifice Location (NG)	18	Thread Sealant
3	Thermocouple lead connection	11	Pilot supply line	19	LP Orifice Holder
4	Pilot Line Connection	12	Heat Shield	20	LP Orifice 18"(Small Hole)
5	Pilot Burner Assembly	13	Lock Nut (3/8 NPT)	21	LP Orifice 24" (Large Hole)
6	Pilot Bracket	14	Street Elbow, 90 deg. (2)	22	Battery, Set (4"AA" & 1 12V)
7	Sheet Metal Screw (1)	15	Machine Screw 10 x 24 (2)	23	Remote Receiver & Hardware
8	Machine Screw (2)	16	Heat Shield, Receiver	24	Straight Flare Fitting, 3/8"

**National code Requirements mandate the use of a Safety Pilot Valve on all LP (Propane) applications. These regulations MUST be followed on all installations of this type.**

# INSTALLATION ON DUAL BURNER SYSTEMS

**⚠ WARNING:** This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects, or other reproductive harm.

This Safety Pilot Kit contains a Control Valve certified by C.S.A., which provides a safe and convenient way to ignite your Energy Efficient gas log set.

**HEARTH PAN INSTALLATION** (These items provided with your Log Set and not included in RVS304 kit)  
If using propane/LP gas, see LP/Propane Conversion sheet before installing hearth pan.

A. Place the burner pan assembly in the center of the fireplace floor. Make sure the front of pan faces forward. Determine if the fireplace has a right or left side gas line feed. The circular “dimpled” hole covering (See *Figure 4A* below) must be knocked out on the appropriate side (right or left) of the burner pan.

**NOTE:** Brace pan on workbench when removing burner knock-out. Strike knock-out plug with a punch or drift.

B. Slide the 3/4” burner support spacer (Part #9) over the Dual Burner bar (Part #10) and move spacer to opposite side of the gas inlet connection (See *Figure 1*).

## INSTALLATION OF NATURAL GAS SAFETY PILOT VALVE

This Safety Pilot Kit contains a Natural Gas Orifice Holder (use the Burner Orifice (See *Figure 2*) provided with your Burner System). If connecting to LP/Propane, use the L.P. Gas hardware and LP instructions, packaged separately in this kit.

C. Attach Pilot Bracket (Part #6) to the Burner Pan, using the sheet metal screws (Part #7). Install sheet metal screws into the two holes of the bracket (See *Figure 3A*).

D. Attach Pilot connection (Part #4) and the Thermocouple connection (Part #3) to the Gas Control Valve in the locations shown in *Figure 4*.

E. Attach the 3/8” straight Flared Fitting (Part #24) to the “IN” position of the Gas Control Valve using pipe sealant (See *figure 8 on page 3*).

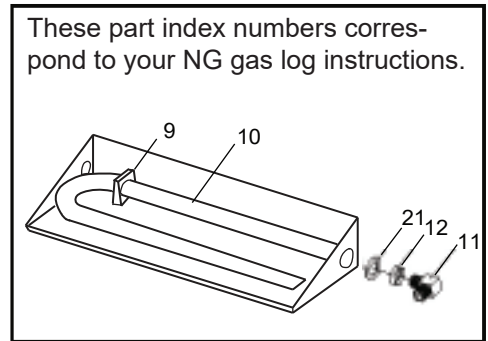
**NOTE:** When connecting to the Control Valve, hand tighten both the Pilot Gas Supply Line connection and Thermocouple connection, then tighten 1/8 turn with a wrench. **DO NOT OVERTIGHTEN** as this may cause improper function of the pilot.

F. Connect the two 3/8” Street Elbows (Part #14).

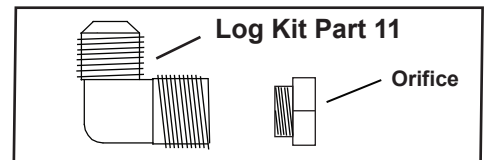
Screw the 3/8” threads of the first elbow into the outlet of the second. Apply pipe sealant to the male threads of the elbow and attach it to the control valve outlet (See *Figure 8*).

G. Place the cut-out of the Heat Shield (Part #12) over the elbow and place it down against the body of the Control Valve. Line up the mounting holes with the threaded holes in the Gas Valve. Install the (2) 10 x 24 Heat Shield mounting screws (Part #15) and tighten them at this time.

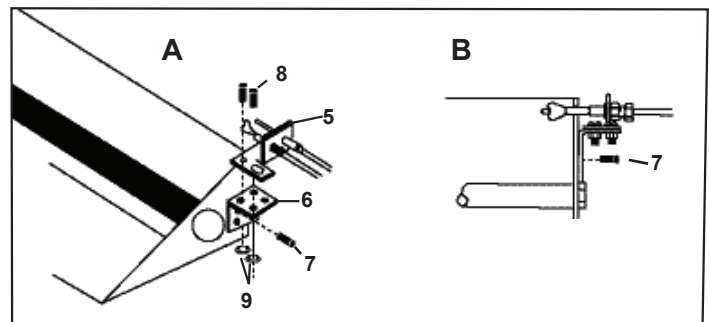
H. Install the burner orifice provided with your Log Set Burner System into NG Orifice holder (Part #17) (See *Figure 5*) with NG orifice (See *Figure 5*). Install Lock-nut (Part #13) onto the the Orifice Holder (at the same end as orifice).



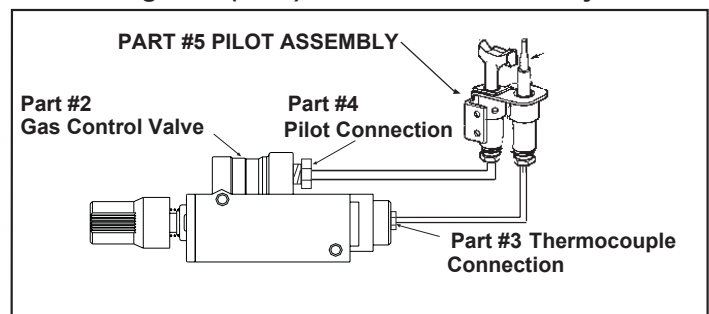
**Figure 1 - Burner pan and bar**



**Figure 2 - Orifice and elbow**



**Figure 3 (A&B) Pilot Burner Assembly**



**Figure 4 Pilot Burner Connections**

# INSTALLATION ON DUAL BURNER SYSTEMS

## INSTALLATION OF NATURAL GAS PILOT VALVE (cont.)

- I. Attach the 3/8" Natural Gas Orifice Holder (Part #17) through the washer (Log Kit Part # 21) and Burner Pan to the Burner Bar using the 3/8" Locknut. Using pipe sealant, connect the Street Elbow (Part #16, attached to the valve assembly) to the Orifice Holder (part #17 or #19) on the 3/8" NPT threads.
- J. The valve assembly can be rotated to horizontal, and to allow it to rest on the fireplace floor. Simply rotate the entire valve assembly by turning the 3/8" Street Elbow (connected to burner orifice) with a wrench (See Figure 8).
- K. Attach Pilot Burner Assembly (Part #5) to the Pilot Bracket (Part #6) using the two machine screws (Part #8) and two nuts (Part #9). See Figure 3A on the previous page. Carefully bend the Pilot tubing (Part #10) when attaching the Pilot Burner Assembly to the Burner Pan. Care should be taken not to kink the tubing which would restrict gas flow to the Pilot Burner.

**IMPORTANT:** Be sure to turn the pilot adjustment screw with a screwdriver two full turns in a counter-clockwise ↶ direction to enable pilot operation (See Figure 7).

**NOTE:** The Pilot Bracket utilizes four mounting holes for adjustment of the Pilot Burner Assembly should your installation require repositioning. Repositioning of the Pilot Burner Assembly may be necessary if the log set is experiencing intermittent shutdown. Shutdown is caused by overheating of the Pilot Burner Assembly by the main burner flame. If shut down is occurring, move the Pilot Burner Assembly over to the next mounting hole so that only the tips of the Pilot Burner Assembly are hanging over the Burner Pan. Only one Mounting Screw (Part #7) will be used in this application.

- L. Place the assembled burner pan back into the center of the fireplace.
- M. Connect the 1/2" gas supply line from the fireplace to the 3/8" Straight Flared fitting (Part #24) with the 3/8" Flared Tubing supplied with the gas log set. Refer to the General Installation Instructions section titled "Connecting Gas Supply to Burner Pan" for full instructions.
- N. Test connections for leaks with soapy water. Retighten if necessary, and retest the connections to determine if any other leaks are present.
- O. Spread granules (Log Kit Part #16) over the installed burner pan. Granules should be sloped to the same angle as the burner pan filling the entire pan (See Figure 9A).
- P. Spread Glowing Embers (Log Kit Part #17) evenly over the top of the granules covering the entire surface area, concentrating on the front and sides of the burner pan as shown for the most realistic burning effect (Figures 9 & 10).
- Q. Place Log Grate (Log Kit Part #7) over the Burner Pan, aligning it as shown in Figure 9B.
- R. Attach Back Log Standoff (Log Kit Part #18) to the back part of the grate (See Figure 9B).

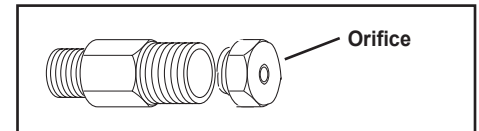


Figure 5 - NG Orifice Holder

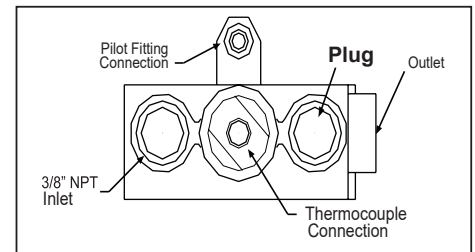


Figure 6 Back View of Valve

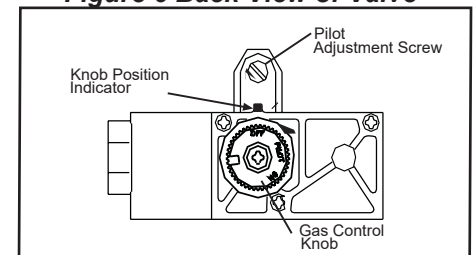


Figure 7 Front View of valve

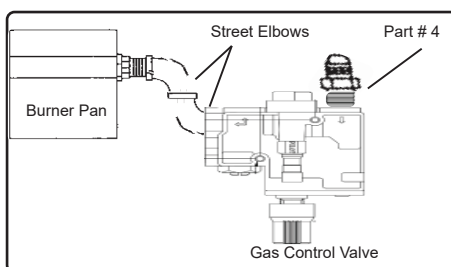


Figure 8 Top View of Valve

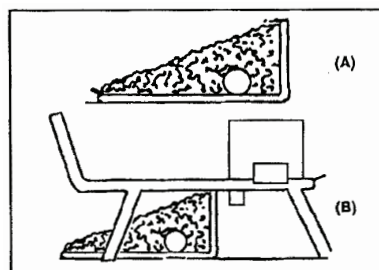


Figure 9

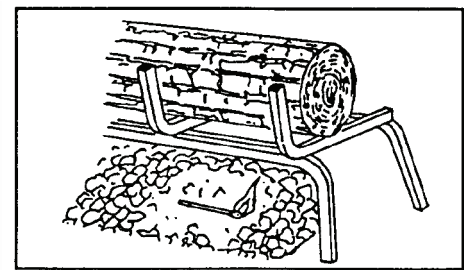



Figure 10

# **LIGHTING YOUR GAS LOGS WITH THE RVS304 SAFETY PILOT KIT**

Turn the gas control knob counterclockwise  to the PILOT position, push the gas control knob IN and hold in for about a minute. This will open the pilot valve and allows gas to flow to the pilot burner. (See Figure 11)

Light the pilot burner while holding the gas control knob in until a strong pilot flame is present. (Approximately 60 seconds)

Release the gas control knob. The gas control knob will hold in and engages the valve power unit.

Turn the gas control knob counterclockwise.  to the ON position, the main burner valve will open and the main burner will ignite.

**NOTE: The Control Knob will need to be depressed slightly in order to move it from the Pilot Position to the "ON" Position.**

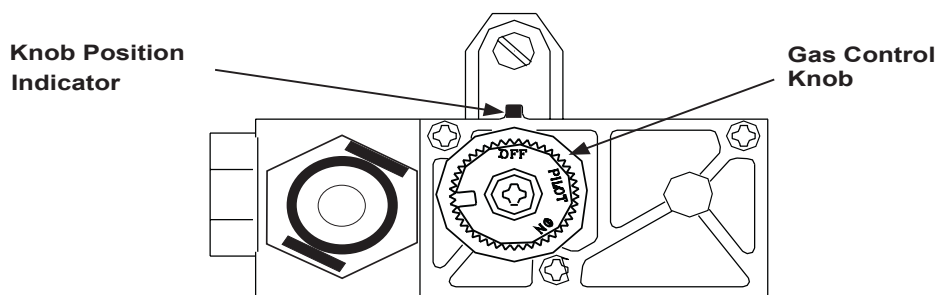
Follow *Remote Control Operating Instructions* on Page 5 to operate the log set from the handset

**NOTE: When remote controls are used, the gas control knob must be in the "ON" position.**

## **Pilot Flame Adjustment**


The Pilot Thermocouple should be engulfed by the Pilot Flame by approximately 1/2". Should the Pilot Flame become unable to heat the Thermocouple properly, you will need to adjust the Pilot. Adjust the height of the Pilot Burner flame by rotating the Pilot Adjustment Screw to the desired 1/2" flame height ( See Figure on page 3).

**IMPORTANT: Be sure to turn the pilot adjustment screw with a screwdriver two full turns in a counterclockwise  direction to enable pilot operation (See Figure 7 on Page 3).**



**Figure 11- Rotate Control Valve Knob to "ON" Position**

## **Shut off Procedure**

1. To shut OFF the system, turn the gas control knob clockwise  to the OFF position. This action will close the main gas valve and disengages the safety pilot valve. However the power unit must drop out before the lighting sequence can begin again. This may take as much as 3 minutes.
2. To relight the pilot, follow the steps in the Pilot Gas and Lighting Procedure section.

**NOTE: The Control Knob will need to be depressed slightly in order to move it from the Pilot Position to the "OFF" Position.**

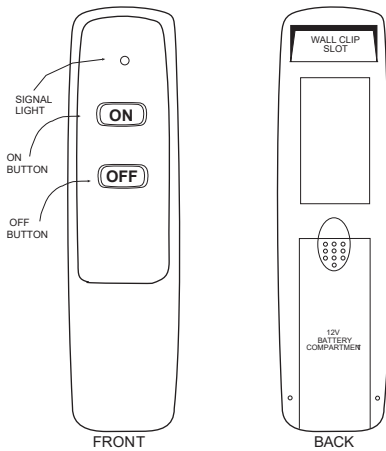
# BATTERY INSTALLATION AND OPERATION INSTRUCTIONS

IF YOU CANNOT READ OR UNDERSTAND THESE INSTALLATION INSTRUCTIONS DO NOT ATTEMPT TO INSTALL OR OPERATE - CALL CUSTOMER SERVICE (800) 221-5647

This remote control system was developed to provide safe, reliable, user-friendly remote control system for gas heating decorative appliances.

The system can be operated manually from the transmitter.

## TRANSMITTER



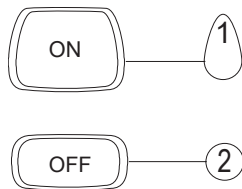
The transmitter may be used to turn the appliance on and off.

The transmitter operates on a 12V (A23) battery that is included. Install the 12V battery supplied with the unit into the battery compartment. It is recommended that ALKALINE batteries always be used for this product.

**Be sure the batteries are installed with the (+) and (-) ends facing the correct direction.**

The LED signal light should illuminate when either the **ON** or **OFF** button is pressed. If the signal light does not illuminate, check the position of the transmitter's battery, and verify the battery is fully charged.

## KEY SETTINGS



1. **ON** - This turns the appliance on.
2. **OFF** - This turns the appliance off.

### IMPORTANT:

THE REMOTE RECEIVER SHOULD BE POSITIONED WHERE AMBIENT TEMPERATURES DO NOT EXCEED 130° F.

## RECEIVER

Install the (4) AA-size batteries supplied with the unit. It is recommended that ALKALINE batteries always be used for this product. Do not mix ALKALINE and GENERAL PURPOSE batteries.

**Be sure the batteries are installed with the (+) and (-) ends facing the correct direction.**

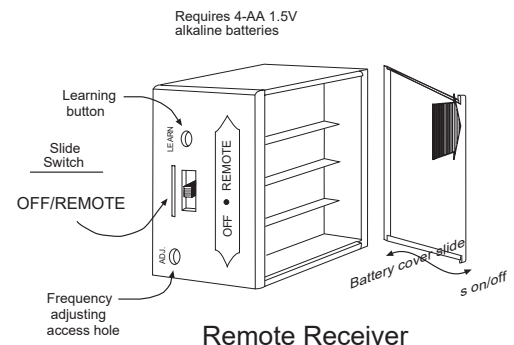
The remote receiver has a 3-position slide switch for selecting the mode of operation, which is **OFF/REMOTE/ON**

- **REMOTE:** The receiver must be in this position if you want to use the appliance, respond to the transmitter on initial use, check the battery positions in the remote. If that does not work, see the **LEARNING TRANSMITTER TO RECEIVER** section.

- **OFF :** will disable the remote receiver.

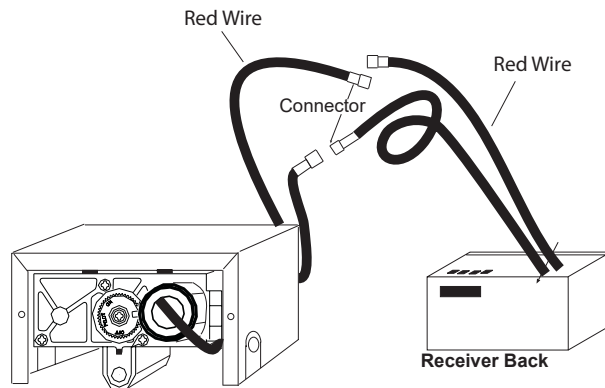
**It is suggested that the slide switch be placed in the OFF position if you will be away from your home for an extended period of time to preserve battery life.**

- **ON :** will allow the appliance burners to operate.



## CONNECTING THE RECEIVER TO THE VALVE KIT

- Attach the connector on the black wire from the valve to the black wire on the receiver.
- Attach the connector on the red wire from the valve to the red wire on the receiver.
- Install the (4) AA batteries in to the receiver.
- After receiver is connected to the valve, make sure the plastic receiver shield (Included) is located over the receiver, then locate the receiver in an area that will not exceed the 130°F.



## LEARNING TRANSMITTER TO RECEIVER

This transmitter has one of 256 unique security codes. It may be necessary to program the remote receiver to learn the security code of the transmitter upon initial use, if batteries are replaced, or if using a replacement transmitter.

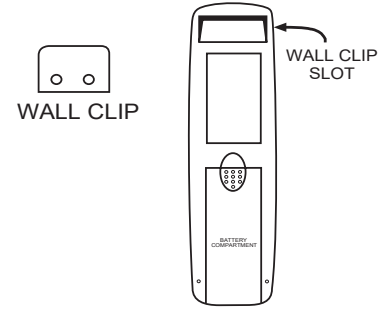
**NOTE:** This receiver can hold up to 3 transmitter codes. This is for the times when a second hand held transmitter is required.

- Make sure the receiver's slide switch is in the **REMOTE** position.
- Press and release the **LEARN** button on the receiver.
- When you hear the "Beep", press and hold the **ON** or **OFF** button for about 2 seconds on the transmitter.
- You will then hear a series of beeps that indicate that your new transmitter has been accepted by the receiver.
- If you press the **LEARN** button on the receiver and you hear no beeps, the receiver is unable to retain any more transmitter codes (make sure that the transmitter and the receiver batteries are properly installed and fully charged).
- To delete all of the transmitter codes on your receiver, press and hold the **LEARN** button for 10 seconds. Then you will hear a series of beeps, indicating that the receiver's memory has been cleared.

## TRANSMITTER WALL CLIP

The transmitter can be hung on a wall using the clip provided.

- Wood - Drill 1/8" pilot holes and install with screws provided.
- Plaster/Wallboard - Drill 1/4" holes, tap plastic anchors in with hammer, then install with the provided screws.



## BATTERY LIFE

Life expectancy of the alkaline batteries in the transmitter and receiver should be at least 12 months. Check and replace all batteries:

- Annually.
- When operating range becomes reduced.
- When transmissions are not received by the remote receiver.
- If the remote receiver batteries measure less than 5.3 volts (all four batteries in combination).
- If the hand held transmitter battery measure less than 9.0 volts.

## TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTIVE ACTION
1. Pilot noise	Excess pressure	<ul style="list-style-type: none"> <li>• Check line pressure and adjust to 7 inch water column.</li> <li>• Adjust pilot flame See page 3.</li> </ul>
2. Pilot will not light	Inadequate gas flow	<ul style="list-style-type: none"> <li>• Check all valves</li> <li>• Clear obstructions</li> <li>• Check for line kinks</li> <li>• Adjust pilot flame See page 3.</li> </ul>
3. Pilot & Burner go out after burning for several minutes (up to one hour)	Overheating of Thermocouple  Thermocouple too tight, or has bad connection	<ul style="list-style-type: none"> <li>• Check to see that Main Burner Flames are not hitting the Thermocouple (move Pilot Assembly so only the tips of the Thermocouple and pilot are hanging over the burner pan).</li> <li>• Reposition logs, if that is the cause, move Main Burner flames away from the Thermocouple.</li> <li>• Loosen Thermocouple slightly</li> </ul>
4. Pilot is operating but burner will not light	Gas Control Knob is not set to "ON"  Low battery power in transmitter or receiver  Wire connections damaged or unplugged	<ul style="list-style-type: none"> <li>• Confirm that the gas control knob is in the "ON" position.</li> <li>• Check batteries, replace if needed</li> <li>• Check the connections on the RED and BLACK wires from the remote receiver.</li> </ul>

### **FCC REQUIREMENTS**

**NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THE EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT**

## LIMITED WARRANTY

**Limited Warranty shall apply to the original purchaser at the original installation point only.**

Pilot, valves and thermocouples are guaranteed for a period of one (1) year under the original manufacturers warranty.

General Warranty: This warranty does not apply in the case of improper installation, neglect, accident, misuse or as a result of modifications of the original product.

All costs for removal and re-installation are the expressed responsibility of the purchaser

For repair, replacement, or service to defective part(s) please contact our Customer Service Hotline, number below. Thereafter with valid warranty registration and proof of purchase, call the Customer Service Hotline for authorization to ship defective part prepaid and insured in original carton to Sure Heat Manufacturing, 3140 Moon Station Road, Kennesaw GA 30144. Goods returned improperly packaged are the sole responsibility of purchaser.

It is agreed that any repair or replacement is the exclusive remedy from Sure Heat Manufacturing. In no case shall Sure Heat be liable for any consequential damage or breach of this or any other warranty expressed or implied whatsoever. This limitation as to consequential damages shall not apply in states where prohibited.

Purchased From: \_\_\_\_\_ Date: \_\_\_\_\_

**Size:**  18"  24"  30" **Model: RVS304 ON/OFF Remote Valve Kit**

Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**Please photocopy and return registration along with proof of purchase  
within 14 days of purchase to:**

**SHM International 3140 Moon Station Road, Kennesaw GA 30144**

**If you have other questions, please contact the  
Customer Service Hotline — (800) 229-5647**