



# HARGROVE GAS LOGS

## SKYTECH VARIABLE FLAME VALVE (SKS-PO-RC) PILOT CONTROL SYSTEM INSTALLATION INSTRUCTIONS

### **FOR YOUR SAFETY**

**DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE LIQUIDS OR FLAMMABLE VAPORS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**

**AIR CURRENTS MAY DRAW FLAMMABLE VAPORS FROM OTHER AREAS OF YOUR HOUSE TO THIS APPLIANCE.**

### **CAUTIONS**

1. This valve should be installed only by a qualified service technician trained in gas safety equipment.
2. Turn off the gas supply before installing the valve.
3. All piping must meet applicable local codes and ordinances and the National Fuel Gas Code (ANSI Z223.1/NFPA NO.54)
4. All wiring must meet the applicable electrical codes and ordinances.
5. Assure that the complete system is operating according to the manufacturer's instructions after installing the Parts Only Kit.
6. Prior to installation, verify conformance with the log unit's installation instructions.
7. Assure that all the piping is free of any foreign matter.

This gas pilot safety valve provides 100% shut-off of both the pilot and main burner gas supplies in the event of a pilot flame failure. This valve is equipped with a gas control knob for lighting the pilot and manual adjustment of the flame height as well as a remote system to adjust flame height.

If the pilot flame goes out during normal operation, or if the gas flow to the pilot flame is insufficient and will not provide enough heat to the thermocouple output, the safety valve will close, stopping the flow of gas to the pilot and burner. This valve is designed for Natural or Propane gas with a maximum flow of 1/2" PSI.

### **FOR YOUR SAFETY WHAT TO DO IF YOU SMELL GAS**

1. **Open windows.**
2. **Extinguish all open flames.**
3. **Do not try to light any appliance.**
4. **Do not touch any electrical switch; do not use the phone in your building.**
5. **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
6. **If you cannot reach your gas supplier, call the fire department.**

# INSTALLATION INSTRUCTIONS

## WARNING

To avoid a potential fire hazard, do not disassemble or attempt to repair the safety gas valve. Disassembly, reassembly or internal adjustment could cause the valve to malfunction, resulting in property damage, personal injury, or death. If the control valve does not operate properly following the installation or service, replace the unit.

***INSTALLING A HARGROVE SAFETY GAS VALVE IN A LOCATION OTHER THAN SPECIFIED IN THIS MANUAL WILL VOID THE WARRANTY EXCEPT WHEN THE SAFETY GAS VALVE IS INSTALLED OUTSIDE THE FIREBOX IN A SAFE AND PROPER INSTALLATION AND ACCESS IS PROVIDED FOR MAINTENANCE AND REPAIR OF THE SYSTEM. A QUALIFIED INSTALLER MUST MAKE INSTALLATION AND ADJUSTMENTS.***

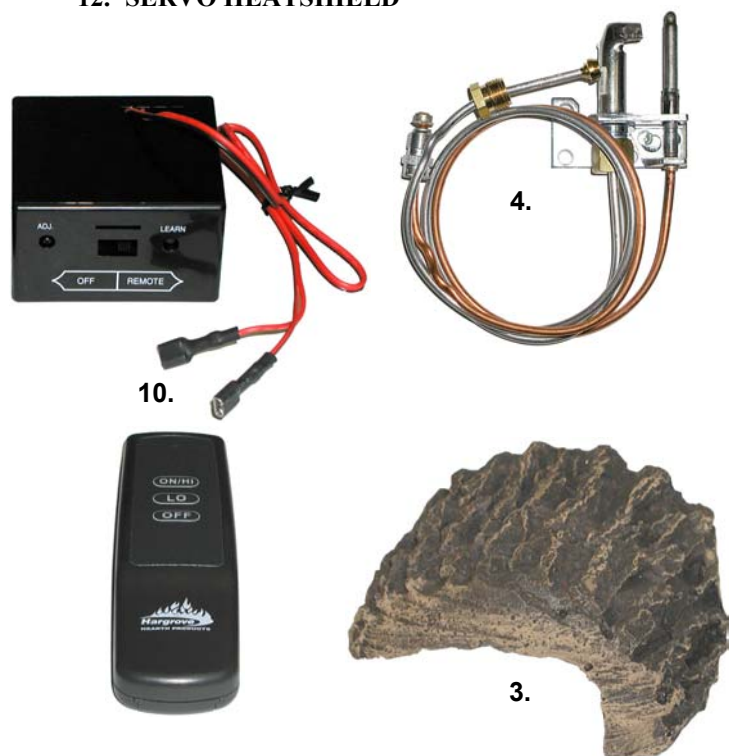
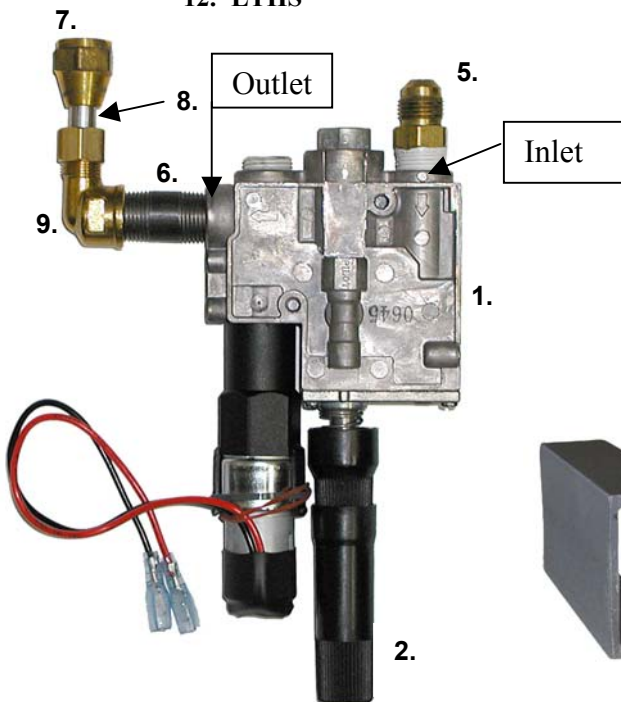
## PARTS LIST

### PART NUMBER

1. SKC-C
2. SPC-EH
3. HSCPCCL
4. RSTPB-18
5. 48-6
6. N-6X1.5
7. 41S-6
8. SC-1
9. 70-6
10. RC-S6V-ST
11. (2) #8 X 1/2" SCREWS
12. LTHS

### PART DESCRIPTION

1. MANUAL SAFETY GAS VALVE
2. CONTROL KNOB STEM EXTENSION
3. GAS VALVE HEAT SHIELD
4. PILOT BURNER ASSEMBLY
5. BRASS UNION 3/8" MIPx3/8"FL
6. 3/8" X 3/8" PIPE NIPPLE
7. BRASS 3/8" MIP X 3/8" FL
8. 1" STAINLESS TUBING
9. ELBOW 3/8" FIP X 3/8" FL COMP.
10. SKYTECH REMOTE AND RECIEVER
11. PILOT SCREWS (NOT SHOWN)
12. SERVO HEATSHIELD



# INSTALLATION INSTRUCTIONS

This gas valve should be installed according to the following instructions. Check for leaks after completing the installation with a soapy water solution.

Make sure to use pipe dope or Teflon tape to help leak-proof your connections.

## INLET GAS SUPPLY CONNECTION

1. Be sure the main gas supply is shut off before starting the installation. It should be located so the manual shut-off valve is easily accessible.
2. The direction of gas flow is indicated by the directional arrow on the inlet and outlet boss.
3. You should use new pipe. If you use old pipe, be sure it is clean and free of rust, scale, burrs, chips and old pipe joint compound.
4. Apply pipe joint compound that is approved for all gases, only to the male threads of the pipe joints. **DO NOT** apply compound to the first two threads. Do not thread pipe too far.

NOTE: Applying pipe joint compound to pipe threads will prevent chips from passing into the internal valve parts, since the pipe joint compound will connect and retain chips that are formed as the pipe is threaded into the body.

5. If a vise or open-ended wrench is used to hold the control while installing the pipe, do not tighten excessively, as this may damage the control.

## SKS-C INSTALLATION

1. Attach and tighten the brass 48-6 to the inlet of the SKS-C.
2. Attach one end of the iron N-6X1.5 to the outlet of the SKS-C, and then attach the other end of the N-6X1.5 to the female end of the 70-6. Tighten down the 70-6 until the end is facing towards the rear (**see Parts List**).
3. Slip the smaller end of the SC-1 into the open end of the 41S-6. Now slide the rest of the small end of the SC-1 into the compression fitting of the 70-6 as far as it will go.
4. While holding down the SC-1, tighten down the compression fitting on the 70-6.
5. Attach the 49-6-6Z2 or the 50-6-8, included in the H-Burner and EB Burner accessory kits, to their respective burner pans with the flare end facing towards the front of the burner pan.
6. Connect and tighten the 41S-6 to the 49-6-6Z2 or the 50-6-8.
7. Use the #8 screws (not illustrated) to attach the RSTPB-18 pilot assembly to the back side of the burner pan in the pre-drilled holes. Attach the pilot so that the pilot burner is above the back wall of the Ember Burner pan. **See Figure 1**

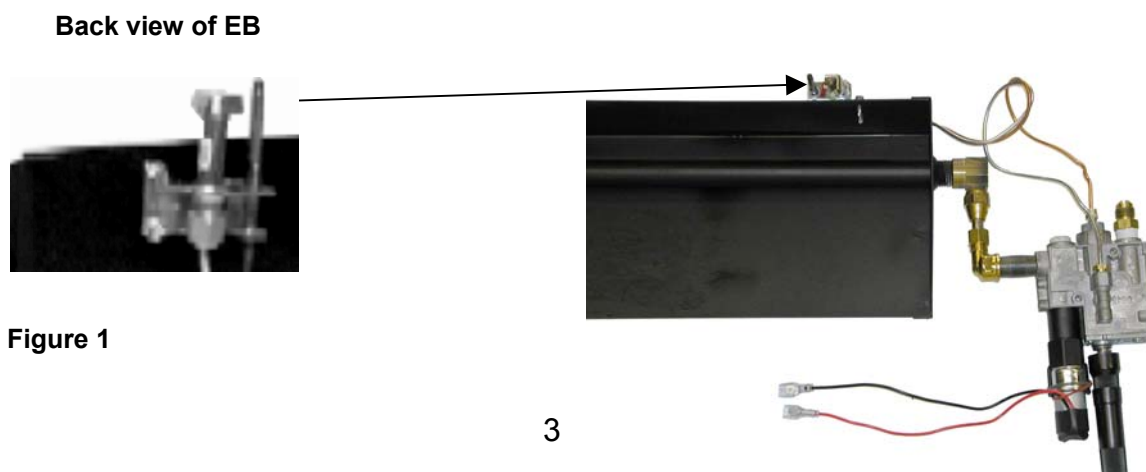
## PILOT GAS CONNECTION

Install the silver tubing from the RSTPB-18 into the pilot gas tap, turning until finger-tight. Tighten an additional 1 1/2 turns. **See Figure 1**

## THERMOCOUPLE CONNECTION

The thermocouple connector should be clean for good electrical contact. Run the thermocouple nut into the thermocouple connection as far as possible by hand. Turn the fitting an additional 1/4 turn.

**See Figure 1**



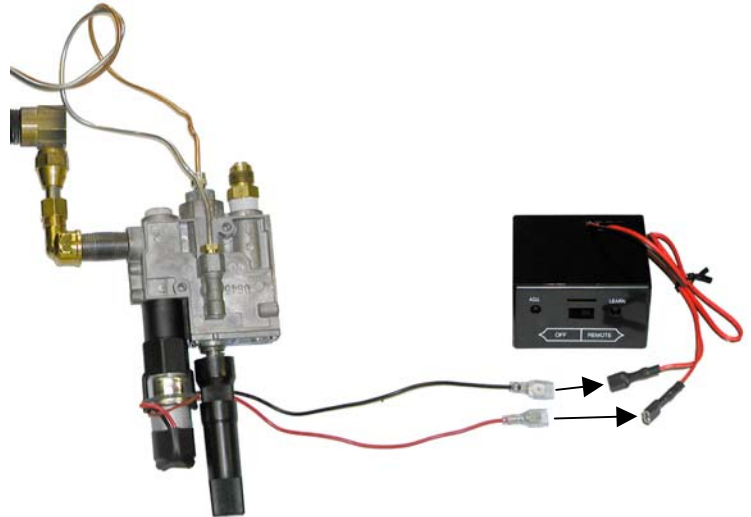
**Figure 1**

## INSTALLATION INSTRUCTIONS (cont'd)

**It is recommended that the remote control box be installed outside the firebox to insure maximum durability during its operation**

### REMOTE CONTROL INSTALLATION

1. Install the batteries included in the box into the handheld and receiver.
2. Locate the red and black wires on the SKS-C coming off of the servo motor.
3. Connect the black wire to the red/black wire on the receiver.
4. Connect the other red wire to the red wire on the receiver
5. Flip the selector switch on the receiver to the "REMOTE" position and use a pin to depress the "LEARN" button. You should hear a confirmation tone once released.
6. Using your handheld, depress the "ON" button and the receiver should give 3 confirmation beeps.



Your remote control is now ready for operation.

## OPERATION INSTRUCTIONS

### FOR YOUR SAFETY

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

**THIS APPLIANCE HAS A PILOT, WHICH MUST BE LIT BY HAND. WHEN LIGHTING THE PILOT, FOLLOW THESE INSTRUCTIONS EXACTLY. BEFORE LIGHTING, SMELL ALL AROUND THE APPLIANCE AREA FOR GAS. BE SURE TO SMELL NEXT TO THE FLOOR BECAUSE SOME GASES ARE HEAVIER THAN AIR AND WILL SETTLE ON THE FLOOR.**

### BASIC OPERATION

1. The knob is for manual pilot, on-off function. Turn knob counterclockwise to the "PILOT" position and depress knob to allow flow of the pilot gas to the pilot burner. **See Figure 2**  
**\*USE ONLY YOUR HAND TO PUSH OR PUSH IN 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. Forced or attempted repair may result in a fire or explosion.
2. **THIS APPLIANCE USES AN INTERLOCK SAFETY DEVICE, WHICH WILL NOT ALLOW THE RELEASE OF GAS UNTIL THE THERMOCOUPLE HAS SUFFICIENTLY COOLED. THIS MAY TAKE UP TO FIVE MINUTES. ATTEMPTING TO RELIGHT THE PILOT PRIOR TO THE RELEASE OF THE INTERLOCK WILL FAIL.**  
Light the pilot and continue to depress the knob for approximately thirty seconds. Release the knob and affirm that the pilot flame is still present. If the pilot flame has extinguished, attempt (1.) again and depress knob for one minute. If pilot flame has extinguished, assure that the thermocouple connection is tight. If the pilot flame has extinguished, call your service technician/dealer.
3. Upon lighting the pilot, continue to turn the knob counterclockwise to the "ON" position.

## OPERATION INSTRUCTIONS (cont'd)

### ADJUSTING FLAME HEIGHT

1. This control uses a servomotor to allow adjustment of flame by the remote control system. The flame height **can not** be adjusted by hand using the knob.
2. Use the remote control to adjust the flame height of the main burner.

### REMOTE TRANSMITTER



Figure 2

### SHUT-OFF PROCEDURE

1. Turn the knob (**Figure 2**) right while pressing down slightly and continue turning right from "PILOT" position to the "OFF" position.  
\*Very high-pressure gas surges may result in internal damage or leaks. If you suspect your control has been exposed to more than 1 1/2 times its maximum, have the unit checked by an expert.