# Comfort Control Retrofit

## Instructions Kits: 20301080, 20101081 Convert to SIT HI/LOW Control

The parts in this kit are intended to replace the Honeywell Comfort Control gas and ignition control system in the following stove models: RFSDV34R(N,P)

#### CAUTION

Before installing this conversion kit:

- Disconnect electrical power to stove.
- Shut off gas supply.
- Shut off gas control valve.
- Allow unit to cool completely.
- Unplug fan cord from electrical outlet.

#### Kit contents:

SIT Gas Valve w/ Stepper Motor Bracket, Valve, #20300156 Ignitor, Piezo, #14D0503 Console Panel, #20301103 Pilot Assembly Knob Extension, #43D0094 Receiver Cover Plate, #54D6000 20308624, 20308625, 20308626 (transmitter, receiver assy, batteries, wire harnesses, hardware)

**Tools required:** Adjustable Wrenches (2), Phillips Screwdriver, Robertson Screwdriver, High Temperature Silicone Sealant, Pipe Thread Sealant

This kit is to be installed only by a qualified service person familiar with the control system in accordance with these manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The installation is not proper and complete until operation of the converted appliance is checked as specified in these manufacturer's instructions supplied with this kit.

#### Procedure

Remove glass door and all logs. Be sure to note the location of each log or refer to stove Homeowner's Manual.

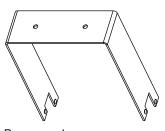
**NOTE:** On some models, the burner and/or pilot shield may need to be removed to complete this conversion. Unless otherwise instructed, the original valve fittings may be re-used to assemble the new components.

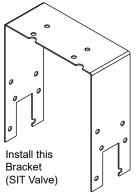
# Removal of Honeywell System Components:

- 1. Remove console by removing two (2) screws near top corners. Discard panel.
- 2. Disconnect fuel supply line fittings from valve inlet fitting.
- 3. Disconnect manifold tube fitting from valve outlet fitting.
- 4. Disconnect pilot supply tube fitting from valve.
- 5. Disconnect all four (4) pilot assembly wires from valve.
- 6. Disconnect power cord from fan and valve. Discard cord.
- 7. Disassemble and remove valve from valve bracket.
- 8. Remove inlet and outlet fittings from valve and clean threads for re-use. Discard valve and mounting screws.
- 9. Remove valve bracket from stove and discard.
- 10. Loosen or remove silicone sealant around pilot tube and wiring where they pass through stove floor.
- 11. Disassemble and remove from stove the pilot assembly, pilot fuel line and pilot wiring and discard all.

#### Installation of SIT System Components

- 1. Install new pilot to stove pilot bracket. Route tubing and wiring through stove floor. Reseal with silicone sealant around where tubing and wiring pass through stove floor.
- 2. Install new valve bracket. Refer to Figure 1 for correct bracket.





Remove and Discard this Bracket (Honeywell Valve)

Fig. 1 Valve Bracket

20301075 10/17 Rev. A

- 3. Apply pipe thread sealant and install brass fittings into SIT valve inlet and outlet.
- Install gas valve to bracket using four (4) screws provided. Valve will be angled up slightly. IMPORTANT: Make sure the gas valve is oriented properly. The valve outlet is on the same side as the terminal block. Figure 2

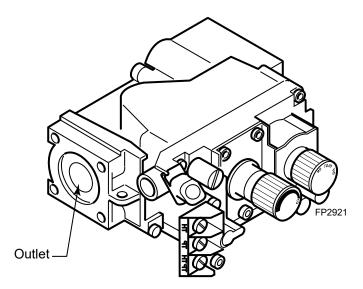


Fig. 2 SIT Valve

- 5. Assemble manifold tube fitting to valve outlet fitting. Tighten securely
- 6. Assemble fuel supply line fitting to valve inlet fitting. Tighten securely.
- 7. Assemble pilot fuel supply tube fitting to valve. Tighten fitting securely. Do not overtighten.
- 8. Assemble pilot thermocouple fitting to valve. Tighten fitting securely. Do not overtighten.

- 9. Connect pilot thermopile wire terminals to valve terminals TP and TP/TH.
- 10. Feed wire from pilot spark electrode through key hole in console panel. Attach wire firmly onto pushon terminal at rear tip of piezo ignitor.
- 11. Install piezo ignitor to console by inserting firmly until snap legs engage panel.
- Assemble receiver assembly to console panel by first sliding C-shaped receiver cover plate down into groove behind front face of receiver. Then secure cover plate to rear side of console panel using two (2) #8 screws provided through front of console.
- 13. To complete assembly of remaining components, refer to assembly instructions and warnings provided with Receiver 20308624 and Transmitter 20308625.
- Attach completed console panel to stove using two (2) screws previously removed.
- 15. Install valve knob extension by aligning indexing notch and tab.
- 16. Reinstall burner (if removed) and logs. Refer to stove Homeowner's Manual for proper log placement.

#### Leak Test

- 1. Turn fuel shut-off valve to ON.
- 2. Light pilot according to instructions provided.
- 3. Using a soap and water solution, check for and repair any detected leaks.

Refer to separate instructions provided with the RC-SITEA kit for information on remote control operation and troubleshooting.

## **Lighting and Operating Instructions**

### 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 heater has a pilot which must be lit manually. When lighting the pilot follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the heater 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 fireplace
- 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, do not try to repair it, call a qualified service technician. Applying force or any attempted repair may result in a fire or explosion.
- D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the heater 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.
- 2. Turn off all electrical power to the fireplace.
- 3. Open control access panel.
- 4. Push in gas control knob slightly and turn clockwise to "OFF".



SIT NOVA

- 5. 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 above. If you do not smell gas, go to the next step.
- 6. Remove glass door before lighting pilot.
- 7. Visibly locate pilot by the main burner.
- Turn knob on gas control counterclockwise to "PILOT".

9. Push the control knob all the way in and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.



- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If after several tries, the pilot will not stay lit, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 10. Replace glass door.
- 11. Turn gas control knob to "ON" position.
- 12. Turn on all electrical power to the fireplace.

### To Turn Off Gas To Heater

- 1. Turn the On/Off switch to Off position or set the thermostat to lowest setting.
- 2. Turn off all electric power to the fireplace if service is to be performed.
- 3. Open louvre assembly bottom.
- Push in gas control knob slightly and turn clockwise to "OFF". Do not force.
- 5. Close control access panel.

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