

SIT 8541800501

SIT 20002266 Pilot Assembly RFN (Comfort Control) Natural Gas Instruction Manual

Model: 8541800501 | Part Number: 20002266

1. INTRODUCTION

This manual provides essential information for the safe and correct installation, operation, and maintenance of the SIT 20002266 Pilot Assembly RFN (Comfort Control) for Natural Gas fireplaces. This component is designed to replace existing pilot assemblies in compatible gas fireplace units, ensuring reliable ignition and flame supervision. Please read these instructions thoroughly before proceeding with any installation or service.

2. SAFETY INFORMATION

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

- Always turn off the gas supply to the appliance and disconnect electrical power before servicing.
- Installation and service must be performed by a qualified installer, service agency, or gas supplier.
- Ensure adequate ventilation during and after installation.
- Check for gas leaks using a soap solution after any gas connection is made or disturbed. Never use an open flame to check for leaks.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Keep the area around the appliance clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon opening the package.

- SIT 20002266 Pilot Assembly RFN (Comfort Control) Natural Gas

Note: Additional tools and materials required for installation (e.g., wrenches, pipe sealant, leak detection solution) are not included.

4. INSTALLATION INSTRUCTIONS

IMPORTANT: Installation must be performed by a qualified professional in accordance with all local codes and regulations.

1. Preparation:

- Turn off the gas supply to the fireplace at the main shut-off valve.
- Disconnect electrical power to the fireplace, if applicable.
- Allow the fireplace to cool completely if it has been in operation.
- Access the existing pilot assembly within the fireplace unit. This may involve removing logs, grates, or access panels.

2. Removal of Old Pilot Assembly:

- Carefully disconnect the thermocouple, thermopile (if present), pilot gas tube, and igniter wire from the existing pilot assembly. Note their positions for reinstallation.
- Unmount the old pilot assembly from its bracket.

3. Installation of New Pilot Assembly:

- Mount the new SIT 20002266 Pilot Assembly into the designated bracket, ensuring it is securely fastened and correctly positioned relative to the main burner.
- Reconnect the pilot gas tube to the new assembly. Ensure all connections are tight but do not overtighten.
- Reconnect the thermocouple, thermopile (if applicable), and igniter wire to their respective terminals on the new pilot assembly.

4. Leak Testing:

- Slowly turn on the main gas supply to the fireplace.
- Apply a non-corrosive leak detection solution (soap and water mixture) to all gas connections made or disturbed during installation.
- Observe for bubbles, which indicate a gas leak. If bubbles are present, turn off the gas supply immediately, tighten the connection, and retest. Repeat until no leaks are detected.

5. Final Steps:

- Restore electrical power to the fireplace.
- Replace any removed logs, grates, or access panels.
- Proceed to the Operating Instructions section to test the pilot and main burner.

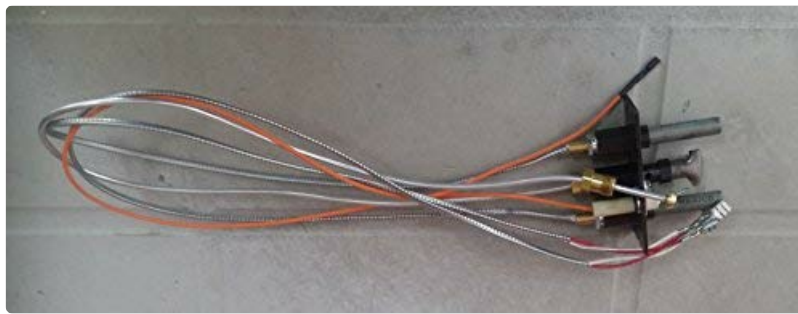


Image 1: The SIT 20002266 Pilot Assembly RFN (Comfort Control) for Natural Gas. This image displays the complete pilot assembly, including the pilot burner, thermocouple, thermopile, and igniter electrode, ready for installation in a compatible gas fireplace.

5. OPERATING INSTRUCTIONS

After successful installation and leak testing, follow these steps to light the pilot and test the main burner:

1. Ensure the gas supply is on and electrical power is restored.
2. Follow the specific lighting instructions provided by your fireplace manufacturer. Typically, this involves turning the gas control knob to the 'PILOT' position, pressing it in, and then pressing the igniter button repeatedly until the pilot flame lights.
3. Once the pilot is lit, continue to hold the control knob in for approximately 30-60 seconds to allow the thermocouple/thermopile to heat up and generate sufficient voltage to hold the pilot valve open.
4. Release the control knob. The pilot flame should remain lit. If it extinguishes, repeat the lighting procedure.
5. Once the pilot is stable, turn the control knob to the 'ON' position.
6. Activate the main burner using your fireplace's control method (e.g., wall switch, remote control). The main burner should ignite smoothly from the pilot flame.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your pilot assembly.

- **Annual Inspection:** Have a qualified service technician inspect the pilot assembly annually for proper flame characteristics, cleanliness, and secure connections.
- **Cleaning:** If the pilot flame appears weak or erratic, it may be due to dust or debris. With the gas supply and power off, gently clean the pilot burner orifice and surrounding area using a soft brush or compressed air. Do not use liquids.
- **Flame Appearance:** The pilot flame should be steady, blue, and engulf the tip of the thermocouple/thermopile. An orange or yellow flame may indicate an issue requiring professional service.

7. TROUBLESHOOTING

If you encounter issues with your pilot assembly, refer to the following common problems and solutions. For persistent issues, contact a qualified service technician.

Problem	Possible Cause	Solution
---------	----------------	----------

Problem	Possible Cause	Solution
Pilot will not light	No gas supply; clogged pilot orifice; faulty igniter; air in gas line.	Ensure gas valve is open; clean pilot orifice; check igniter wire connection; purge air from gas line by attempting to light several times.
Pilot lights but will not stay lit when control knob is released	Thermocouple/thermopile not heating sufficiently; faulty thermocouple/thermopile; loose connection.	Hold control knob longer (60 seconds); ensure pilot flame fully engulfs thermocouple/thermopile tip; check connections; replace thermocouple/thermopile if faulty.
Main burner does not light from pilot	Pilot flame too small or misdirected; faulty gas valve; control system issue.	Adjust pilot flame if possible (consult fireplace manual); contact a qualified technician for gas valve or control system diagnosis.

8. SPECIFICATIONS

- **Part Number:** 20002266
- **Model Number:** 8541800501
- **Type:** RFN Pilot Assembly (Comfort Control)
- **Fuel Type:** Natural Gas
- **Manufacturer:** SIT
- **Item Weight:** 7.4 ounces
- **Package Dimensions:** 7.09 x 4.88 x 2.64 inches

9. WARRANTY AND SUPPORT

Specific warranty information for the SIT 20002266 Pilot Assembly is not provided in this document. For details regarding warranty coverage, please refer to the documentation included with your purchase or contact the retailer or manufacturer directly.

For technical support or assistance with installation and troubleshooting, it is recommended to contact a qualified HVAC or fireplace technician. You may also reach out to the manufacturer, SIT, through their official customer service channels for product-specific inquiries.