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› White-Rodgers 36C03-333 Standing Pilot Gas Valve Instruction Manual

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White-Rodgers 36C03-333 Standing Pilot Gas Valve Instruction Manual

Model: 36C03-333

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1. INTRODUCTION

This manual provides essential instructions for the proper installation, operation, and maintenance of the White-Rodgers 36C03-333 Standing Pilot Gas Valve. This valve is designed for use in heating systems requiring a standing pilot ignition. Please read this manual thoroughly before attempting any installation or service to ensure safe and efficient operation.



Figure 1: White-Rodgers 36C03-333 Standing Pilot Gas Valve. A close-up view of the White-Rodgers 36C03-333 Standing Pilot Gas Valve, showing its metal construction and various connection points.

2. SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Always shut off the main gas supply before installing or servicing the gas valve.
- Ensure all electrical connections are disconnected before working on the unit.
- Verify that the gas type (Natural Gas or LP) matches the valve's configuration. An LP conversion kit is included for flexibility.
- All work should be performed by a qualified technician in accordance with local codes and regulations.
- Check for gas leaks using a soap solution after installation; never use an open flame.

3. SETUP & INSTALLATION

The White-Rodgers 36C03-333 gas valve is designed for standing pilot ignition systems. Follow these general steps for installation:

1. **Preparation:** Turn off the main gas supply and electrical power to the appliance. Allow the appliance to cool.
2. **Remove Old Valve:** Disconnect all gas piping and electrical wiring from the existing gas valve. Carefully remove the old valve.

3. **Install New Valve:** Apply appropriate pipe sealant to all threaded connections. Install the new White-Rodgers 36C03-333 valve, ensuring correct orientation. The valve features a 1/2 inch inlet and a 3/4 inch outlet. A reducer bushing kit (3/4 x 1/2 In. and 1/2 x 3/8 In.) is provided for adapting to various pipe sizes.
4. **Electrical Connections:** Connect the 24VAC wiring to the appropriate terminals on the valve. For systems requiring only two wires to energize the gas valve solenoid, connect them to the outer 'TH' and 'TR' terminals. If your system has a high-temperature safety switch already in series with the 24VAC transformer power, you may use the included jumper to bypass the unneeded high-temperature safety connection on the valve.
5. **Gas Type Conversion (if necessary):** If converting from Natural Gas to LP or vice-versa, use the included LP conversion kit and follow its specific instructions.
6. **Leak Test:** After all connections are made, slowly turn on the main gas supply. Check all gas connections for leaks using a non-corrosive soap solution. Bubbles indicate a leak. Tighten connections as needed and re-test.
7. **Pilot Light Adjustment:** Refer to the appliance manufacturer's instructions for lighting and adjusting the pilot flame.

4. OPERATING INSTRUCTIONS

The White-Rodgers 36C03-333 is a standing pilot gas valve. This means a small pilot flame remains lit continuously, ready to ignite the main burner when heat is called for.

1. **Lighting the Pilot:** Follow the specific instructions provided by your appliance manufacturer. Generally, this involves turning the gas control knob to the 'PILOT' position, pressing and holding it down, and then lighting the pilot burner. Continue holding the knob for about 30-60 seconds until the thermocouple heats up and holds the pilot flame.
2. **Main Burner Operation:** Once the pilot is lit and stable, turn the gas control knob to the 'ON' position. When the thermostat calls for heat, the 24VAC coil in the gas valve will energize, opening the main gas flow to the burner, which will then be ignited by the standing pilot flame.
3. **Shutting Down:** To turn off the appliance, turn the gas control knob to the 'OFF' position. This will shut off both the main burner and the pilot flame.

5. MAINTENANCE

The White-Rodgers 36C03-333 gas valve is designed for reliable operation with minimal maintenance. However, periodic checks are recommended to ensure continued safe and efficient performance.

- **Annual Inspection:** It is recommended to have a qualified HVAC technician inspect your heating system, including the gas valve, annually.
- **Pilot Flame Check:** Periodically observe the pilot flame. It should be a steady, blue flame enveloping the tip of the thermocouple. A weak, yellow, or wavering flame may indicate a dirty pilot orifice or other issues.
- **Cleanliness:** Keep the area around the gas valve clean and free from dust, debris, and obstructions.
- **Connections:** Ensure all gas and electrical connections remain tight and free from corrosion.

6. TROUBLESHOOTING

Before attempting any troubleshooting, ensure the main gas supply is on and electrical power is supplied to the appliance. If you are unsure about any step, contact a qualified service technician.

Problem	Possible Cause	Solution
Pilot light will not stay lit	<ul style="list-style-type: none"> • Dirty or faulty thermocouple • Weak pilot flame • Internal electromechanical safety shutoff valve issue 	<ul style="list-style-type: none"> • Clean or replace thermocouple • Adjust pilot flame (if possible) • Inspect pilot orifice for blockage • If the issue persists, the gas valve may need replacement.
Main burner does not ignite	<ul style="list-style-type: none"> • Pilot light not lit • No call for heat from thermostat • Faulty 24VAC wiring or transformer • Gas valve solenoid failure 	<ul style="list-style-type: none"> • Light pilot light • Check thermostat settings and ensure it's calling for heat • Verify 24VAC power to the valve terminals using a voltmeter • If 24VAC is present but the valve doesn't open, the valve may be faulty.
Gas odor detected	Gas leak	Immediately shut off gas supply. Ventilate the area. Do not operate any electrical switches. Contact a qualified technician or your gas company immediately.

7. SPECIFICATIONS

Feature	Detail
Model Number	36C03-333
Brand	White-Rodgers
Ignition Type	Standing Pilot
BtuH Capacity	230,000
Valve Type	Fast Opening
Coil Volts	24 VAC
Gas Type	Natural Gas / LP (LP Conversion Kit Included)
Inlet Connection Size	1/2 Inch
Inlet Connection Type	FIP
Outlet Connection Size	3/4 Inch
Outlet Connection Type	FIP
Reducer Bushing Kit	3/4 x 1/2 In. and 1/2 x 3/8 In.

Feature	Detail
Side Taps	Yes
Ambient Temperature Range	-40 to 175 Degrees F
Amps AC	0.23
Pressure Setting Range	2.5 to 5.0 In. WC
Material	Metal
Exterior Finish	Stainless Steel
Product Dimensions (L x W x H)	5 x 6.5 x 4 inches
Item Weight	1.2 pounds
Certifications	ETL, ULC
UPC / GTIN	786710005657
Manufacturer	APR Supply Co.

8. WARRANTY & SUPPORT

Warranty Information: Specific warranty terms and conditions for the White-Rodgers 36C03-333 Standing Pilot Gas Valve are provided by the manufacturer. Please refer to the documentation included with your purchase or visit the official White-Rodgers website for detailed warranty information.

Technical Support: For technical assistance, installation questions, or service inquiries, please contact a qualified HVAC professional. You may also reach out to White-Rodgers customer support directly through their official website or contact information provided with the product packaging.