

Field Controls GVD-10PL

Field Controls GVD-10PL 10-Inch Vent Damper

INSTRUCTION MANUAL

FIELD CONTROLS

Image of the Field Controls GVD-10PL 10-inch vent damper, showcasing its round design and motor assembly.

1. Overview

The Field Controls GVD-10PL is a 10-inch vent damper designed to improve the efficiency of heating systems by controlling the flow of air through the venting system. This device operates in conjunction with 24 VAC, 60Hz intermittent ignition and standing pilot ignition systems, ensuring that the vent is open only when the appliance is operating. This manual provides essential information for the proper installation, operation, and maintenance of your GVD-10PL vent damper.

2. Product Features

- **Compatibility:** Operates with all 24 VAC, 60Hz intermittent ignition and standing pilot ignition systems.
- **Construction:** Features stainless steel construction for superior corrosion resistance and durability.
- **Damper Operation:** Power opens in approximately 15 seconds and power closes in approximately 15 seconds. The damper motor is de-energized when at rest.
- **Hold Open Switch:** Includes a hold open switch that allows the damper to be placed in an open position, facilitating troubleshooting of appliance problems.
- **Wiring Harness:** Equipped with a keyed wiring harness connector plug, ensuring correct wiring connection and preventing improper installation.
- **Safety Switches:** Incorporates dual safety switches that permit the burner to fire only when the damper is in the fully open position. This design ensures that the unit does not interfere with existing appliance safety controls when installed correctly.

3. Setup and Installation

Installation of the GVD-10PL vent damper should be performed by a qualified technician in accordance with all local codes and regulations. Improper installation can lead to unsafe conditions or equipment malfunction.

3.1 Safety Precautions

- Always disconnect power to the appliance before beginning installation or maintenance.
- Ensure proper ventilation during installation.
- Follow all manufacturer's instructions for the appliance to which the damper is being installed.

3.2 Mounting

1. Select an appropriate location in the vent pipe, ensuring sufficient clearance (minimum 4 inches) around the damper for installation and service.
2. Cut a section of the vent pipe to accommodate the damper.
3. Securely install the damper into the vent pipe, ensuring a tight seal to prevent exhaust leaks.

3.3 Wiring

1. Connect the damper's wiring harness to the appliance's control system. The keyed connector ensures correct polarity and connection.
2. Ensure all electrical connections are secure and comply with local electrical codes.
3. Verify that the damper receives 24 VAC power from the appliance's control circuit.

4. Operation

The GVD-10PL vent damper operates automatically in conjunction with your heating appliance.

- When the appliance calls for heat, the damper motor receives power and begins to open. This process takes approximately 15 seconds.
- Once the damper is fully open, the dual safety switches close, allowing the appliance's burner to ignite.
- When the appliance satisfies the call for heat, power to the damper motor is removed, and the damper begins to close, also taking approximately 15 seconds. The motor is de-energized when the damper is in its closed (rest) position.
- The **Hold Open Switch** can be manually activated to keep the damper in the open position. This feature is useful for diagnostic purposes or when servicing the appliance, allowing the system to operate without the damper cycling. Remember to return the switch to its normal operating position after troubleshooting.

5. Maintenance

Regular maintenance ensures the longevity and efficient operation of your vent damper. Perform these checks annually or as recommended by your heating system technician.

- **Visual Inspection:** Check the damper for any signs of physical damage, corrosion, or debris accumulation.

- **Movement Check:** Observe the damper's opening and closing cycle to ensure smooth and unobstructed movement. The damper blade should move freely without binding.
- **Wiring Inspection:** Verify that all electrical connections are secure and free from corrosion or damage.
- **Cleaning:** If debris is present, carefully clean the damper blade and housing. Ensure no foreign objects impede its operation.
- **Safety Switch Test:** A qualified technician can verify the proper function of the dual safety switches to ensure the burner only fires when the damper is fully open.

For any complex maintenance or repairs, contact a certified HVAC professional.

6. Troubleshooting

If you experience issues with your GVD-10PL vent damper, consult the following troubleshooting guide. For persistent or complex problems, contact a qualified service technician.

6.1 Damper Not Opening/Closing

- **Check Power:** Ensure the appliance is calling for heat and that 24 VAC power is being supplied to the damper motor.
- **Wiring:** Inspect the wiring harness for loose or damaged connections.
- **Obstructions:** Look for any physical obstructions preventing the damper blade from moving.
- **Hold Open Switch:** Verify that the hold open switch is not accidentally engaged, preventing automatic operation.

6.2 Burner Not Firing

- **Damper Position:** Ensure the damper is fully open. The dual safety switches prevent burner ignition if the damper is not completely open.
- **Safety Switches:** If the damper is open but the burner does not fire, the safety switches or their wiring may be faulty. This requires professional diagnosis.
- **Appliance Issues:** Rule out other issues with the heating appliance itself, such as thermostat settings or fuel supply.

7. Specifications

Attribute	Value
Model Number	46487501
Diameter	10 inches
Width	14-7/8 inches
Length	12-1/8 inches
Application	Air Quality

Attribute	Value
Voltage	24 Volts (AC)
Clearance	4 inches
Exposed Pipe	10-7/8 inches
Motor Timing	15 Seconds Power Closed
Shape	Round
Item Weight	2 pounds
Package Dimensions	9 x 7 x 5 inches
UPC	090747581153

8. Warranty and Support

Field Controls products are manufactured to high-quality standards and are typically covered by a manufacturer's warranty against defects in materials and workmanship. For specific warranty details, duration, and terms, please refer to the documentation included with your product or visit the official Field Controls website.

For technical assistance, troubleshooting beyond this manual, or to inquire about replacement parts, please contact Field Controls customer support directly. Ensure you have your model number (GVD-10PL) and part number (46487501) available when contacting support.

Field Controls Contact Information:

Please refer to the official Field Controls website or product packaging for the most current contact details.

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