Vaillant VMI 280-7

Vaillant VMI 280-7 Boiler Flow Sensor Turbine (Part No. 20029604)

Instruction Manual

Introduction

The Vaillant Flow Sensor Turbine (Part No. 20029604) is a critical component designed for specific Vaillant boiler models. It measures the flow rate of water within the boiler system, enabling the boiler to regulate heating and hot water functions efficiently. Proper installation and maintenance are essential for the correct operation of your heating system.
This part is compatible with various Vaillant boiler models, including:

- VMI 280 – 7, VMI 280 – 7 R3
- VMI 282 – 7, VMI 282 – 7 R2, VMI 282 – 7 R3
- VMI 32/362 – 7, VMI 32/362 – 7 R3
- VMW 24/280 – 5 R1, VMW 24/280 – 5 R3
- VMW 24/282 – 5 R1, VMW 24/282 – 5 R2, VMW 24/282/3 – 5
- VMW 240 – 3, VMW 240 – 5
- VMW 240/2 – 3, VMW 240/2 – 3 R1, VMW 240/2 – 5, VMW 240/2 – 5 R1, VMW 240/2 – 5 R3
- VMW 242 – 3, VMW 242 – 5
- VMW 242/2 – 3, VMW 242/2 – 3 R1, VMW 242/2 – 3 R2, VMW 242/2 – 5, VMW 242/2 – 5 R1, VMW 242/2 – 5 R2, VMW 242/2 – 5 R3
- VMW 28/362 – 5, VMW 28/362 – 5 R3
- VMW 280 – 5
- VMW 280/2 – 3 R3, VMW 280/2 – 5, VMW 280/2 – 5 R1, VMW 280/2 – 5 R3
- VMW 282 – 5
- VMW 282/2 – 3 R3, VMW 282/2 – 5, VMW 282/2 – 5 R1, VMW 282/2 – 5 R2
- VMW 282/3 – 5
- VMWES283625R3

Installation (Setup)

Important Safety Information: Installation of boiler components should only be performed by a qualified and certified heating engineer. Incorrect installation can lead to serious injury, property damage, or boiler malfunction. Always disconnect the boiler from the main power supply and ensure the system is depressurized and drained before attempting any work.

1. **Preparation:** Ensure the boiler is completely isolated from the electrical supply and the gas supply is turned off. Allow the boiler to cool down.
2. **Drain System:** Partially or fully drain the boiler system as required to access the flow sensor.
3. **Locate Old Sensor:** Identify the existing flow sensor turbine within your Vaillant boiler. Refer to your specific boiler model's service manual for its exact location.
4. **Remove Old Sensor:** Carefully disconnect any electrical connections and plumbing fittings attached to the old sensor. Remove the old sensor, noting its orientation.
5. **Install New Sensor:** Insert the new Vaillant Flow Sensor Turbine (Part No. 20029604) in the correct orientation. Ensure all seals are properly seated to prevent leaks.
6. **Reconnect:** Reconnect all electrical wiring and plumbing fittings securely.
7. **Refill and Bleed:** Refill the boiler system and bleed any air from the system according to your boiler's main instruction manual.
8. **Test:** Restore power and gas supply. Test the boiler's operation, checking for leaks and proper hot water function.



Image: Vaillant VMI 280-7 Boiler Flow Sensor Turbine (Part No. 20029604). This image shows the compact design of the flow sensor, typically featuring a turbine mechanism and electrical connector for integration into the boiler's control system.

Operating Instructions

The flow sensor turbine operates automatically as an integral part of your Vaillant boiler's control system. It detects water flow, signaling the boiler to initiate heating or hot water production as needed. No direct user interaction is required for its operation. Once correctly installed, the boiler's existing controls will manage the function of this component.

Maintenance

The flow sensor turbine itself typically requires no direct user maintenance. However, regular professional servicing of your Vaillant boiler system, as recommended by the manufacturer (usually annually), will ensure all components, including the flow sensor, are functioning correctly. This includes checking for debris or blockages that might affect water flow and sensor accuracy. A qualified engineer can inspect the sensor for wear or damage during routine service.

Troubleshooting

If your Vaillant boiler exhibits issues such as inconsistent hot water temperature, failure to ignite for hot water, or displays error codes related to water flow, the flow sensor turbine may be a contributing factor. Before assuming the sensor is faulty, ensure other common issues are ruled out (e.g., low system pressure, closed valves).

Common Symptoms of a Faulty Flow Sensor:

- No hot water, but central heating functions normally.
- Boiler fires intermittently or cycles on and off when hot water is demanded.
- Boiler displays a specific fault code related to water flow or hot water production.

Recommended Action:

- Consult your boiler's main instruction manual for specific error codes and their recommended solutions.
- Contact a qualified and certified heating engineer for professional diagnosis and replacement. Do not attempt to repair or replace this component without proper qualifications and safety equipment.

Specifications

Part Number	20029604
Product Type	Flow Sensor Turbine
Brand	Vaillant
Model Compatibility	VMI 280-7, VMI 282-7, VMI 32/362-7, VMW 24/280-5, VMW 24/282-5, VMW 240-3, VMW 240-5, VMW 240/2, VMW 242-3, VMW 242-5, VMW 242/2, VMW 28/362-5, VMW 280-5, VMW 280/2, VMW 282-5, VMW 282/2, VMW 282/3, VMWES283625R3 (and various sub-models)
Manufacturer	Vaillant
Number of Pieces	1
ASIN	B01N4TW9LZ

Warranty Information

Warranty for this replacement part is typically provided by the seller or the original manufacturer at the time of purchase. Please refer to your purchase documentation or contact the seller for specific warranty terms and conditions. Information regarding spare parts availability and specific warranty details may vary.

Customer Support

For technical assistance, installation guidance, or warranty inquiries regarding the Vaillant VMI 280-7 Boiler Flow Sensor Turbine (Part No. 20029604), please contact your authorized Vaillant service provider or the seller, Recamania. It is highly recommended to have all installation and repair work performed by a certified professional to ensure safety and proper functionality.
Seller: Recamania
For general Vaillant product support, please visit the official Vaillant website or contact their customer service directly.