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Riello 3008001

Riello 3008001 Gas Nozzle Instruction Manual

For BS2-912T1, BS2D-916T1, BS2/M-916M Burners

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Riello 3008001 Gas Nozzle. This nozzle is designed for use with Riello burner models BS2-912T1, BS2D-916T1, and BS2/M-916M. Adherence to these instructions is crucial for safe and efficient performance of your heating system. Please read this manual thoroughly before attempting any installation or service.

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.

- Installation and service must be performed by a qualified installer, service agency, or gas supplier.
- Always disconnect power to the burner before performing any service or maintenance.
- Ensure proper ventilation when working on gas appliances.
- Check for gas leaks after any service involving gas connections.
- Use only genuine Riello replacement parts.

3. PRODUCT OVERVIEW

The Riello 3008001 Gas Nozzle is a critical component in the combustion system of compatible Riello burners. It is responsible for atomizing and shaping the fuel spray for efficient ignition and combustion. This nozzle is specifically designed for the following Riello burner models:

- BS2-912T1
- BS2D-916T1
- BS2/M-916M



Figure 1: Riello 3008001 Gas Nozzle. This image shows the metallic nozzle with a threaded base and a cylindrical body, featuring a central opening for fuel delivery.

For a complete replacement of all nozzles in a compatible burner, six (6) pieces of the Riello 3008001 Gas Nozzle are typically required.

4. SETUP AND INSTALLATION

IMPORTANT: Installation of the gas nozzle should only be performed by a qualified and certified technician. Incorrect installation can lead to gas leaks, inefficient combustion, and dangerous operating conditions.

1. Preparation:

- Ensure the burner is completely shut down and disconnected from all power sources.
- Close the main gas supply valve to the appliance.
- Allow the burner to cool down if it has been in operation.

2. Accessing the Nozzle:

- Carefully open the burner housing according to the specific burner model's service manual.
- Locate the existing gas nozzle assembly.

3. Removing the Old Nozzle:

- Using appropriate tools, carefully unscrew and remove the old nozzle.
- Inspect the nozzle holder and surrounding components for any damage or debris. Clean if necessary.

4. Installing the New Nozzle:

- Gently screw the new Riello 3008001 Gas Nozzle into the nozzle holder.
- Tighten to the manufacturer's specified torque. **Do not overtighten**, as this can damage the nozzle or holder.
- Ensure the nozzle is correctly oriented and seated.

5. Reassembly and Testing:

- Reassemble the burner housing.
- Restore gas supply and electrical power.
- Perform a thorough leak test on all gas connections.
- Start the burner and verify proper operation, including flame appearance and combustion efficiency, using appropriate diagnostic equipment. Adjust burner settings as required by the burner's service manual.

5. OPERATING GUIDELINES

The Riello 3008001 Gas Nozzle is a passive component that functions as part of the burner's overall operation. Its primary role is to deliver fuel in a precise spray pattern. The operation of the burner itself is governed by its control system. Refer to the specific Riello burner model's operating manual for detailed instructions on starting, stopping, and adjusting the burner.

Ensure that the burner is always operated within its specified parameters to prevent damage to the nozzle and other components, and to maintain safe and efficient combustion.

6. MAINTENANCE

Regular maintenance of the gas nozzle is essential for optimal burner performance and longevity. Maintenance should be performed by a qualified technician.

- **Annual Inspection:** The nozzle should be inspected annually as part of routine burner maintenance. Look for signs of wear, corrosion, or blockage.
- **Cleaning:** If the nozzle appears dirty or partially blocked, it may be carefully cleaned using appropriate solvents and soft brushes. **Do not use abrasive materials or tools that could damage the nozzle's orifice or spray pattern.**
- **Replacement:** Nozzles are wear items and should be replaced periodically, typically every 1-3 years, depending on burner usage and fuel quality. Replace the nozzle immediately if any damage, significant wear, or persistent combustion issues are

observed.

- **Matching Nozzle:** Always replace with a Riello 3008001 Gas Nozzle or an equivalent specified by Riello for your burner model. Using an incorrect nozzle can severely impact burner performance and safety.

7. TROUBLESHOOTING

If you experience issues with your burner, the gas nozzle could be a contributing factor. Always consult a qualified technician for diagnosis and repair.

Symptom	Possible Cause (Nozzle Related)	Action
Poor flame quality (e.g., yellow, smoky, unstable)	Clogged or worn nozzle orifice, incorrect nozzle type.	Inspect and clean or replace the nozzle. Verify correct nozzle model.
Burner fails to ignite	Completely blocked nozzle, incorrect nozzle spray pattern.	Inspect for blockage. Replace if necessary. Ensure correct nozzle is installed.
Reduced heating capacity	Partially clogged or worn nozzle, leading to insufficient fuel delivery.	Inspect and clean or replace the nozzle.
Excessive fuel consumption	Worn nozzle orifice, leading to an oversized spray or poor atomization.	Replace the nozzle.

Note: Many burner issues can stem from causes unrelated to the nozzle. Always perform a comprehensive diagnostic check of the entire burner system.

8. SPECIFICATIONS

Feature	Detail
Product Model Number	3008001
Manufacturer	Riello
Compatibility	Riello Burner Models: BS2-912T1, BS2D-916T1, BS2/M-916M
Required Quantity for Full Replacement	6 pieces (for compatible models)
ASIN	B07GVKDBX7
Batteries Required	No
Spare Part Availability	Information unavailable (as per product data)

9. WARRANTY AND SUPPORT

Specific warranty information for the Riello 3008001 Gas Nozzle was not provided in the product details. For warranty inquiries, technical support, or to locate authorized service centers, please contact Riello directly or refer to the documentation provided with your Riello burner system.

Always ensure that any service or replacement is carried out by qualified personnel to maintain product warranty and ensure safe operation.



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