

# Riello Gulliver RG1 Oil Burner Pump Instruction Manual

Model: 3007771/RI

## INTRODUCTION

This instruction manual provides essential information for the safe and correct use, installation, and maintenance of the Riello Gulliver RG1 Oil Burner Pump, model 3007771/RI. This pump is designed for use with Riello RDB, Unit, Gulliver RG0 (358T1 - 359T1 - 360T1), Gulliver RG1 (363T1), and Gulliver RG2 (377T1) series oil burners. Please read this manual thoroughly before any operation or service.

## IMPORTANT SAFETY INFORMATION

### **WARNING: Risk of injury or equipment damage.**

The replacement of spare parts on boilers or boiler burners must be carried out with extreme caution. To ensure the safety and proper functioning of your appliance, it is strongly recommended that this operation be performed by a qualified technician. Incorrect installation can lead to risks of malfunction, safety hazards, and potential damage to the heating system or property.

This product is sold in its original manufacturer's packaging and has not undergone any modifications. Due to the nature of this product, professional installation is highly recommended.

- Always disconnect power to the burner before attempting any installation, maintenance, or repair.
- Wear appropriate personal protective equipment (PPE) during installation and service.
- Ensure all connections are secure and leak-free.
- Refer to the complete burner manual for specific installation and operational procedures.

## PRODUCT OVERVIEW

The Riello Gulliver RG1 Oil Burner Pump (model 3007771/RI) is a critical component for various Riello oil burners. It is designed to deliver fuel efficiently and reliably to the burner. This specific pump is supplied without a coil, which must be acquired separately if needed.



**Image 1:** Front view of the Riello Gulliver RG1 Oil Burner Pump. The pump features a metallic housing with visible hex screws and a central brass shaft. The front plate is marked "R.B.L." with directional arrows, indicating flow. This image shows the robust construction and key external features of the pump.

## TECHNICAL SPECIFICATIONS

Feature	Detail
<b>Manufacturer</b>	Riello
<b>Model Number</b>	3007771/RI
<b>Compatibility</b>	Riello RDB, Unit, Gulliver RG0 (358T1 - 359T1 - 360T1), Gulliver RG1 (363T1), Gulliver RG2 (377T1)
<b>Shaft Diameter</b>	8 mm
<b>Rotation</b>	D (Right)
<b>Pressure</b>	12 bar
<b>Hub</b>	32 mm
<b>d_bit</b>	36
<b>Coil Included</b>	No (delivered without coil)

## INSTALLATION

As highlighted in the safety information, the installation of the Riello Gulliver RG1 pump requires specialized knowledge and should only be performed by a qualified and certified technician. Incorrect installation can lead to severe operational issues, safety hazards, and void any warranties. General steps for a qualified technician typically include:

- 1. Power Disconnection:** Ensure the main power supply to the burner and heating system is

completely disconnected and locked out.

2. **Fuel Line Isolation:** Close fuel supply valves to prevent spills.
3. **Old Pump Removal:** Carefully disconnect fuel lines and electrical connections from the old pump. Remove mounting bolts and extract the old pump.
4. **New Pump Installation:** Mount the new Riello Gulliver RG1 pump securely, ensuring proper alignment with the burner shaft.
5. **Connections:** Reconnect fuel lines, ensuring all fittings are tight and leak-free. Reconnect electrical wiring according to the burner's wiring diagram.
6. **Priming:** Follow the burner manufacturer's instructions for priming the fuel system to remove air.
7. **Leak Check & Testing:** Restore power and carefully check for any fuel leaks. Test the burner operation, monitoring fuel pressure and combustion.

*Always refer to the specific installation instructions provided with your Riello burner model for detailed steps and safety precautions.*

## OPERATION

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The Riello Gulliver RG1 pump operates as part of the oil burner system, drawing fuel from the tank and delivering it at a precise pressure to the nozzle for atomization and combustion. Once installed correctly, the pump's operation is typically automatic, controlled by the burner's control unit.

- Ensure the fuel tank has an adequate supply of clean fuel.
- Verify that all safety devices (e.g., low oil cut-off) are functioning correctly.
- The pump will engage when the burner calls for heat, maintaining the necessary fuel pressure for efficient combustion.
- Regularly monitor the burner's performance for any unusual noises, smells, or changes in flame appearance, which could indicate a pump issue.

## MAINTENANCE

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Proper maintenance is crucial for the longevity and efficient operation of your Riello Gulliver RG1 pump and the entire heating system. Maintenance should be performed by a qualified technician.

- **Annual Inspection:** Have a qualified technician inspect the pump annually as part of the overall burner service. This includes checking for leaks, wear, and proper pressure settings.
- **Filter Replacement:** Ensure the oil filter (if applicable in your system) is replaced regularly according to the burner manufacturer's recommendations to prevent contaminants from reaching the pump.
- **Pressure Check:** Verify that the pump is maintaining the correct operating pressure as specified by the burner manufacturer.
- **Shaft Seal Check:** Inspect the pump shaft seal for any signs of oil leakage.

## TROUBLESHOOTING

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If you experience issues with your oil burner, the pump may be a contributing factor. Always consult a qualified technician for diagnosis and repair.

Problem	Possible Cause	Action (for qualified technician)
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<b>Burner fails to ignite</b>	No fuel delivery, low fuel pressure, air in fuel lines, clogged filter.	Check fuel level, prime pump, inspect/replace filter, check pump pressure.
<b>Burner cycles on/off frequently</b>	Inconsistent fuel pressure, air in system.	Check for air leaks, verify pump pressure stability.
<b>Oil leaks from pump</b>	Damaged shaft seal, loose fittings.	Inspect and replace seals, tighten connections.
<b>Unusual noise from pump</b>	Air in system, worn bearings, cavitation.	Bleed air, inspect pump internals for wear.

*Do not attempt to repair the pump yourself if you are not a qualified technician. Contact a professional for all troubleshooting and repair needs.*

## WARRANTY AND SUPPORT

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Information regarding specific warranty terms for the Riello Gulliver RG1 pump (model 3007771/RI) is not available in this document. Please refer to your purchase documentation or contact your supplier or a certified Riello service center for warranty details and technical support.

For spare parts availability, the provided information states "Information indisponible sur les pièces détachées" (Information unavailable on spare parts). It is recommended to contact Riello directly or an authorized distributor for spare part inquiries.