

Zoeller J295

Zoeller Waste-Mate 290 Series J295 High Head Sewage Pump Instruction Manual

Model: J295 | Part Number: 295-0010

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Zoeller Waste-Mate 290 Series Model J295 High Head Sewage Pump. Please read this manual thoroughly before attempting to install or operate the pump. Retain this manual for future reference.

The Zoeller Waste-Mate 290 Series J295 is a high-head submersible sewage pump designed for residential or light commercial dewatering and wastewater applications. It is capable of transferring groundwater, effluent, or raw sewage. Its vortex impeller design minimizes clogging and allows for the passage of 2-inch spherical solids. Constructed from durable cast iron with a powder-coated epoxy finish, this pump is built for corrosion resistance and efficient heat dissipation, ensuring a long service life.

2. SAFETY INFORMATION

WARNING: Risk of electric shock. This pump is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.

WARNING: Always disconnect the pump from the power source before handling or servicing.

- Ensure all electrical connections comply with local codes and ordinances.
- Do not operate the pump in an explosive atmosphere.
- Do not pump flammable liquids.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.
- Keep hands clear of the impeller and discharge opening when the pump is connected to power.
- Do not lift the pump by its power cord.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon unpacking:

- Zoeller Waste-Mate 290 Series J295 High Head Sewage Pump
- 20 ft Power Cord
- Instruction Manual (this document)

Note: Additional accessories such as control panels (e.g., 10-1084, 10-1112) are sold separately.

4. SETUP AND INSTALLATION

Proper installation is crucial for the pump's performance and longevity. If you are unsure about any step, consult a qualified professional.

4.1 Pre-Installation Checks

- Inspect the pump for any shipping damage.
- Ensure the power supply matches the pump's voltage (200-208 Volts, 3 Phase).
- Verify the basin or pit is clean and free of debris.

4.2 Electrical Connection

This pump requires a 200-208 Volt, 3-phase electrical supply. All wiring must be performed by a qualified electrician in accordance with national and local electrical codes.

- Connect the pump to a dedicated circuit with appropriate overcurrent protection.
- Ensure proper grounding to prevent electrical shock.
- The 20 ft power cord should not be modified or extended without consulting a qualified electrician.

4.3 Plumbing Connection

The pump features a 2-inch NPT female flanged vertical discharge.

- Connect the discharge piping to the pump's flanged outlet. Use appropriate sealant for a watertight connection.
- Install a check valve in the discharge line to prevent backflow into the basin.
- Ensure the discharge piping is adequately supported to prevent strain on the pump.
- The pump is designed for submersible operation. Ensure it is fully submerged during use.



Figure 1: Zoeller Waste-Mate 290 Series J295 High Head Sewage Pump. This image shows the general appearance of the pump, highlighting its robust cast iron construction and discharge port.

5. OPERATING INSTRUCTIONS

The Zoeller J295 is a manual pump, meaning its operation is typically controlled by an external control panel or switch (not included with the pump itself). It is designed for continuous duty when submerged.

5.1 Initial Start-Up

- After installation, ensure the pump is fully submerged in the liquid to be pumped.
- Verify all plumbing connections are secure and leak-free.
- Engage the power supply to the pump via its control panel or switch.
- Observe the pump's operation. It should start pumping liquid immediately.
- Check for any unusual noises or vibrations. If detected, disconnect power and investigate.

5.2 Normal Operation

- The pump is designed to operate automatically when connected to a compatible control panel with float switches.
- Ensure the pump basin remains free of excessive debris that could impede float switch operation or clog the pump.
- The maximum fluid temperature for continuous operation is 130°F (54°C). Do not exceed this temperature.

6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your pump. Always disconnect power before performing any maintenance.

6.1 Routine Checks (Monthly)

- **Basin Inspection:** Check the pump basin for excessive buildup of solids or debris. Clean as necessary.
- **Pump Operation:** Verify the pump cycles on and off correctly (if using a control panel).
- **Discharge Line:** Ensure the discharge line is free of obstructions.

6.2 Annual Inspection

- **Impeller Inspection:** Disconnect power, remove the pump from the basin, and inspect the impeller for wear or damage. Clear any lodged debris.
- **Shaft Seal:** Inspect the shaft seal for any signs of leakage. The pump features a single stainless steel carbon & ceramic rotary seal. If leakage is observed, professional service may be required.
- **Power Cord:** Check the power cord for any signs of fraying, cuts, or damage. Replace if necessary.

7. TROUBLESHOOTING

Before attempting any repairs, always disconnect the pump from the power source.

Problem	Possible Cause	Solution
Pump does not start or run.	No power to the pump. Thermal overload tripped. Motor failure.	Check circuit breaker/fuse. Ensure power cord is securely plugged in. Reset thermal overload (if applicable, 1 Ph only). Consult a qualified technician for motor issues.

Problem	Possible Cause	Solution
Pump runs but does not pump water or pumps slowly.	Clogged impeller or discharge line. Air lock. Low voltage.	Disconnect power, remove pump, and clear any obstructions from impeller and discharge. Ensure pump is fully submerged. Verify correct voltage supply.
Pump cycles too frequently.	Check valve failure. Float switch issues (if applicable). Basin too small.	Inspect and replace check valve if faulty. Adjust or replace float switches. Consult a professional for basin sizing.
Excessive noise or vibration.	Debris in pump. Worn bearings. Improper installation.	Disconnect power and clear debris. If noise persists, professional service may be required for bearings. Recheck installation for proper seating and support.

8. SPECIFICATIONS

Feature	Detail
Model	J295
Manufacturer Part Number	295-0010
Series	Waste-Mate 290 Series
Product Type	High Head Sewage Pump
Application	Sewage/Dewatering
Operation	Manual (requires external control)
Horsepower (HP)	2 HP
Voltage	200-208 Volts
Phase	3 Phase
Frequency	60 Hz
Amperage	14.3 Amps
Speed	3450 RPM
Seal Type	Single (Stainless Steel Carbon & Ceramic Rotary)

Feature	Detail
Pump Housing Material	Cast Iron
Impeller Material	Cast Iron
Impeller Type	Non-clogging vortex
Maximum Solids Handling	2 inches spherical
Discharge Connection	2 inch NPT Flanged Vertical
Maximum Flow Rate	214 GPM (Gallons Per Minute)
Maximum Head	75 ft
Cord Length	20 ft
Maximum Fluid Temperature	130°F (54°C)
Finish	Corrosion-resistant, powder coated epoxy

9. WARRANTY AND SUPPORT

For warranty information and technical support, please contact Zoeller Company directly or visit their official website. Keep your purchase receipt as proof of purchase.

Zoeller Company Contact Information:

- Refer to the official Zoeller website or product packaging for the most current contact details.

Note: Warranty terms and conditions may vary. Please consult the official warranty statement provided with your product or on the manufacturer's website.