Gecko FMXP2E (05334012-2040)

Gecko FMXP2E Jet Pump User Manual

Model: 05334012-2040

1. INTRODUCTION

Thank you for choosing the Gecko FMXP2E Jet Pump. This manual provides detailed instructions for the safe and efficient installation, operation, and maintenance of your new pump. Please read this manual thoroughly before attempting to install or operate the pump. Retain this manual for future reference.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions could result in serious injury, death, or property damage.

- **Electrical Safety:** All electrical work must be performed by a qualified electrician in accordance with all national and local electrical codes. Ensure the power supply is disconnected before performing any service or maintenance.

- **Water Safety:** Do not operate the pump dry. Ensure the pump is properly primed before starting. Water temperature should not exceed 104°F (40°C).

- **Installation:** Install the pump in a location that provides adequate ventilation and protection from the elements. Ensure the pump is securely mounted to prevent vibration.

- **Maintenance:** Always disconnect power before servicing. Allow the pump to cool down before handling.

- **Children:** Keep children away from the pump and its operating area.

3. PRODUCT OVERVIEW

The Gecko FMXP2E Jet Pump is designed for high-performance spa and hot tub applications, offering greater flow rates and energy efficiency. This 2-speed pump allows for versatile operation, suitable for multi-jet spa systems.

Key Features:

- Model: FMXP2E (05334012-2040)

- Horsepower: 3 HP

- Voltage: 230V

- Frequency: 60Hz

- Amperage: 12.0/3.9A (2-Speed)

- Intake and Discharge: 2" MBT (Male Buttress Thread)

- Flow Rate: Up to 280 Gallons Per Minute (GPM)

- Frame Size: 56Y

- Discharge can be oriented in 4 positions.

- cULus or cURus certified.

Product Specifications:

Specification	Value
Manufacturer	Gecko
Part Number	05334012-2040
Product Dimensions	17.63 x 7.88 x 8.69 inches
Style	Flo-Master XP2e
Material	Aluminum, steel, copper, plastic
Power Source	Corded Electric
Item Package Quantity	1
Maximum Flow Rate	280 Gallons Per Minute

Product Images:

Figure 3.1: General view of the Gecko FMXP2E Jet Pump, showing the wet end and motor assembly.

Figure 3.2: Side view of the pump, highlighting the intake and discharge ports with 2" MBT unions.

Figure 3.3: View of the motor end of the pump, showing the electrical connection points and cooling fins.
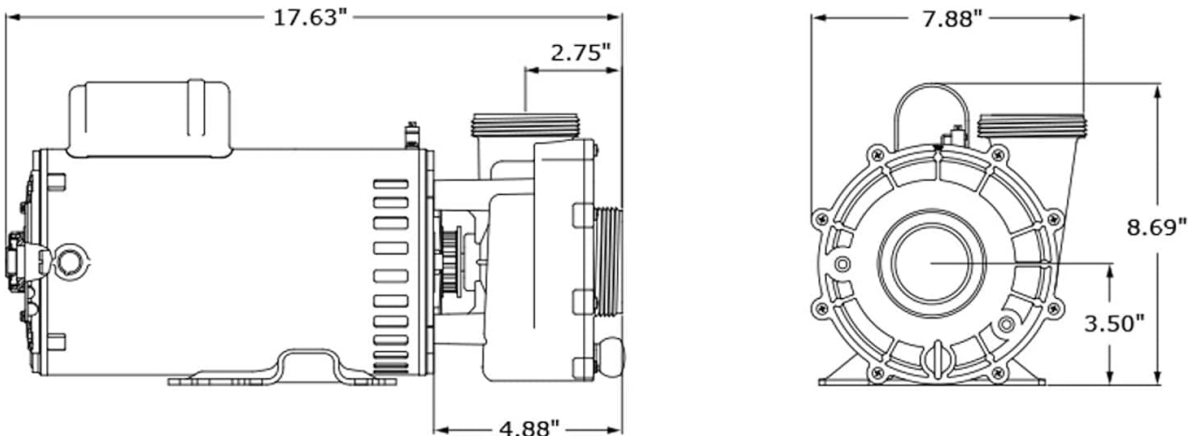

Figure 3.4: Dimensional drawing of the FMXP2E pump, indicating overall length, width, and height for installation

4. INSTALLATION AND SETUP

4.1 Pre-Installation Checks

- Verify that the pump's electrical specifications (voltage, amperage, frequency) match your power supply.
- Ensure the installation site is level, dry, well-ventilated, and protected from freezing temperatures and direct sunlight.
- Confirm that plumbing connections are clean and free of debris.

4.2 Mounting the Pump

Securely mount the pump to a solid, level surface using appropriate fasteners. This will minimize vibration and noise during operation. Ensure there is sufficient space around the pump for ventilation and future servicing.

4.3 Plumbing Connections

1. Connect the spa plumbing to the 2" MBT intake and discharge ports of the pump.
2. Use appropriate PVC unions and sealant to ensure watertight connections. Avoid overtightening.
3. Ensure that the plumbing lines are properly supported to prevent strain on the pump's connections.
4. The discharge port can be rotated to one of four positions to accommodate various plumbing configurations. To rotate, loosen the bolts securing the wet end to the motor, adjust the wet end, and then retighten the bolts securely.

4.4 Electrical Connections

IMPORTANT: All electrical wiring must be performed by a licensed electrician.

1. Ensure the main power supply to the spa or hot tub is disconnected at the circuit breaker.
2. Open the wiring compartment on the pump motor.
3. Connect the 230V power supply wires to the appropriate terminals as indicated on the motor's wiring diagram (typically Line 1, Line 2, and Ground).
4. For 2-speed operation, ensure the low-speed and high-speed wires are connected correctly to your spa pack or control system. Refer to your spa control system's manual for specific wiring instructions.
5. Secure all connections and ensure proper grounding.
6. Close the wiring compartment cover securely.

4.5 Priming the Pump

Before starting the pump for the first time, it is crucial to prime it to prevent damage from dry running.

1. Ensure the spa or hot tub is filled with water to the proper operating level.
2. Open all air bleed valves in the plumbing system to allow air to escape.
3. Loosen the union on the discharge side of the pump slightly until water begins to flow out, indicating the pump is full of water. Retighten the union.
4. Alternatively, if your pump has a bleed screw on the wet end, open it until water flows out, then close it.
5. Once primed, the pump is ready for initial operation.

5. OPERATION

5.1 Initial Start-Up

1. After ensuring the pump is primed and all connections are secure, restore power to the spa at the circuit breaker.
2. Activate the pump from your spa's control panel. Listen for smooth operation.
3. Observe for any leaks around the plumbing connections. If leaks are present, immediately shut off power and tighten connections.

5.2 2-Speed Operation

The FMXP2E pump features two speeds:

- **Low Speed:** Typically used for filtration cycles, heating, and quiet operation. This speed consumes less power.
- **High Speed:** Provides maximum flow for powerful jet action and hydrotherapy. This speed consumes more power.

Refer to your spa's control panel instructions for switching between low and high speeds.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Gecko FMXP2E Jet Pump.

6.1 Routine Inspection

- Periodically check for any unusual noises or vibrations during operation.
- Inspect plumbing connections for leaks.
- Ensure the motor is free from debris and has adequate ventilation.

6.2 Cleaning

- **Impeller and Wet End:** If flow is reduced, the impeller or wet end may be obstructed. Disconnect power, drain the system, and carefully disassemble the wet end to clear any debris.
- **Motor:** Keep the motor exterior clean and free of dust and dirt to ensure proper cooling. Do not spray water directly onto the motor.

6.3 Winterization (for outdoor spas)

If the spa is to be shut down for winter, ensure the pump is completely drained to prevent freezing damage.

1. Disconnect power to the pump.
2. Open drain plugs on the wet end (if present) or loosen unions to allow all water to escape.
3. Run the pump briefly (a few seconds) after draining to expel any remaining water, then immediately shut off.
4. Store the pump in a warm, dry place if possible, or ensure it is thoroughly dry and protected from freezing.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your pump.

Problem	Possible Cause	Solution
Pump does not start	No power; tripped breaker; faulty wiring; seized motor	Check power supply and breaker; inspect wiring (qualified electrician); contact support if motor is seized.
Low water flow	Clogged filter; air in system; obstructed impeller; closed valves	Clean/replace filter; re-prime pump; clear impeller; open all valves.
Pump is noisy	Air in system; cavitation; loose mounting; worn bearings	Re-prime pump; ensure adequate water supply; tighten mounting bolts; contact support for bearing issues.
Water leak at pump	Loose plumbing connections; worn shaft seal; cracked housing	Tighten unions; replace shaft seal (qualified technician); replace pump if housing is cracked.
Pump runs hot	Insufficient ventilation; low water flow; prolonged dry running	Ensure clear airflow around motor; check for clogs; ensure pump is primed.

If you encounter a problem not listed here or if the suggested solutions do not resolve the issue, please contact Gecko customer support or a qualified service technician.

8. WARRANTY AND SUPPORT

8.1 Warranty Information

The Gecko FMXP2E Jet Pump typically comes with a **2-year warranty** from the date of purchase, covering defects in materials and workmanship. Please retain your proof of purchase for warranty claims. The warranty does not cover damage caused by improper installation, misuse, neglect, freezing, or unauthorized repairs.

8.2 Customer Support

For technical assistance, warranty claims, or to purchase replacement parts, please contact Gecko customer support through their official website or authorized distributors. When contacting support, please have your pump's model number (05334012-2040) and serial number readily available.
You can visit the Gecko Store on Amazon for more information or to find contact details.