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› Hayward Universal H-Series 400,000 BTU Propane Pool and Spa Heater (Model W3H400FDP) Instruction Manual

Hayward W3H400FDP

Hayward Universal H-Series 400,000 BTU Propane Pool and Spa Heater (Model W3H400FDP) Instruction Manual

Model: W3H400FDP

Brand: Hayward

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Hayward Universal H-Series 400,000 BTU Propane Pool and Spa Heater, Model W3H400FDP. Please read this manual thoroughly before attempting to install, operate, or service the unit. Retain this manual for future reference.

The Hayward Universal H-Series heater is designed to provide reliable heating for in-ground pools and spas. It features a durable cupro nickel heat exchanger for corrosion protection and an efficient hydraulic design.



Image 1.1: Front view of the Hayward Universal H-Series Pool and Spa Heater. This image displays the main unit with its control panel visible on the top right.

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.

- Always disconnect power before servicing the unit.
- Ensure proper ventilation around the heater.
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Installation and service must be performed by a qualified installer, service agency, or gas supplier.
- Keep all combustible materials away from the heater.

3. SETUP AND INSTALLATION

Installation of the Hayward Universal H-Series heater requires specialized knowledge of gas, electrical, and plumbing systems. It is strongly recommended that installation be performed by a qualified professional.

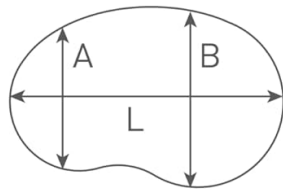
3.1 Site Selection and Dimensions

Choose a location that allows for adequate ventilation, proper clearances from combustible materials, and easy access for service. The heater dimensions are approximately 39.6 x 32.8 x 30.6 inches (L x W x H) and it weighs 214 pounds.

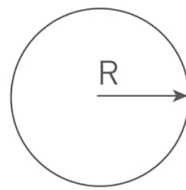
SELECTING THE RIGHT SIZE

FOR YOUR SWIMMING POOL

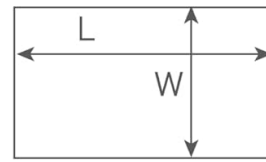
1. Determine your pool's surface area in square feet:



$$\text{AREA} = (A+B) \times L \times .45$$



$$\text{AREA} = R \times R \times 3.14$$



$$\text{AREA} = L \times W$$

2. Select the model that corresponds with a surface area that is equal to, or just greater than, your pool's surface area. For indoor pool installations, divide the pool's surface area by 3.

MODEL (P/N)	SURFACE AREA
W3H400	1,200
W3H250	750
W3H200	600
W3H150	450

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Image 3.1: Diagram illustrating the dimensions of the Hayward Universal H-Series heater. The image shows the length, width, and height measurements of the unit.



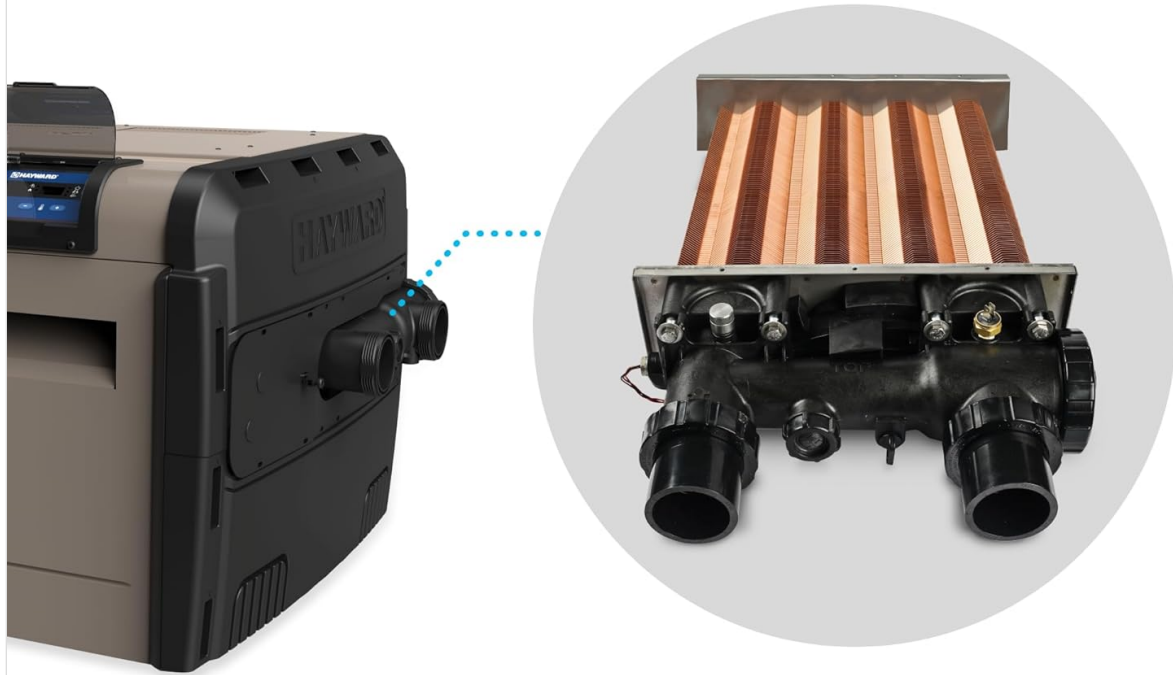
Image 3.2: Another view of the Hayward Universal H-Series heater with key dimensions labeled, indicating 24 inches in height, 34 inches in length, and 29.5 inches in width.

3.2 Sizing the Heater

To ensure efficient heating, select a heater model appropriate for your pool's surface area. The W3H400FDP model is suitable for pools with a surface area up to 1,200 sq ft. For indoor pool installations, divide the pool's surface area by 3 to determine the appropriate model.

DURABLE PERFORMANCE

EFFICIENT CUPRONICKEL MEANS LESS UPKEEP & COST



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Image 3.3: A guide for selecting the correct heater size based on pool surface area. It provides formulas for calculating area for various pool shapes (oval, round, rectangular) and a table matching model numbers to surface area capacities.

3.3 Plumbing and Gas Connections

The heater requires proper plumbing connections to the pool's circulation system and a dedicated propane gas supply. Universal junction boxes on both sides simplify electrical and automation setup.



INTUITIVE CONTROLS

The easy-to-read control pad with a protective cover ensures simple operation, even in bright sunlight

CONVENIENT INSTALLATION

Universal junction boxes on both sides simplify electrical & automation setup

EASY MAINTENANCE

Front-panel-only access makes servicing quick and easy

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Image 3.4: This image highlights key installation features of the Hayward Universal H-Series heater, including intuitive controls, convenient installation with universal junction boxes, and easy front-panel-only access for maintenance.

4. OPERATING INSTRUCTIONS

The Hayward Universal H-Series heater features an intuitive control pad for easy operation.

4.1 Control Panel Overview

The control panel, located on the front of the unit, allows you to set the desired water temperature and monitor the heater's status. It is designed for easy readability, even in bright sunlight, and is protected by a cover.



Image 4.1: Close-up view of the Hayward Universal H-Series heater's control panel. The digital display shows "84" and various indicator icons for operation and status. Buttons for temperature adjustment are visible below the display.

4.2 Setting Water Temperature

1. Open the protective cover of the control panel.
2. Use the + and - buttons to adjust the desired water temperature. The current temperature setting will be displayed.
3. The heater will automatically activate to reach and maintain the set temperature, provided the pool pump is running and there is adequate water flow.

4.3 Heater Operation

Once the desired temperature is set and the pool pump is circulating water, the heater will ignite and begin heating. The display will indicate when the heater is actively heating. The industry-leading hydraulic design helps reduce circulation pump run time, contributing to energy savings.

5. MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your Hayward heater. Always disconnect power to the unit before performing any maintenance.

5.1 Routine Checks

- Inspect the area around the heater for any debris or obstructions.
- Check for any signs of leaks in the plumbing or gas connections.
- Ensure the pool's water chemistry is balanced, as unbalanced water can cause corrosion and premature failure of components, especially the heat exchanger.

5.2 Heat Exchanger

The Hayward Universal H-Series features a durable cupro nickel heat exchanger, offering protection against corrosion. While designed for longevity, periodic inspection by a qualified technician is recommended to ensure optimal performance.



Image 5.1: An illustration showing the internal cupro nickel heat exchanger of the Hayward Universal H-Series heater. This component is crucial for efficient heat transfer and corrosion resistance.

5.3 Winterization

In regions subject to freezing temperatures, proper winterization of the heater is crucial to prevent damage. Consult a pool professional for specific winterization procedures for your system.

6. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues. For complex problems, contact a qualified service technician.

Problem	Possible Cause	Solution
Heater not turning on	No power, gas supply off, low water flow, thermostat setting too low.	Check power supply, ensure gas valve is open, verify pool pump is running and filter is clean, increase thermostat setting.
"LO" or "Low Water Flow" error	Insufficient water pressure or flow through the heater.	Check pool pump operation, clean pool filter, ensure all valves are open, inspect for blockages in plumbing.
Heater cycles on and off frequently	Improper water flow, dirty filter, oversized heater for pool, or sensor issue.	Verify water flow, clean filter, consult a professional to assess sizing or sensor function.
Poor heating performance	Low gas pressure, dirty burner, heat exchanger issues, or heat loss from pool.	Ensure adequate gas supply, have burner inspected, check pool cover usage, contact service technician.

7. SPECIFICATIONS

- **Model:** W3H400FDP
- **BTU Output:** 400,000 BTU
- **Fuel Type:** Propane Gas
- **Heat Exchanger:** Cupro Nickel
- **Product Dimensions (L x W x H):** 39.6 x 32.8 x 30.6 inches
- **Item Weight:** 214 pounds
- **Manufacturer:** Hayward
- **Emissions:** Low NOx (meets air quality standards)

8. WARRANTY AND SUPPORT

Hayward products are manufactured to the highest standards of quality and reliability. For specific warranty details, please refer to the warranty card included with your product or visit the official Hayward website. Keep your purchase receipt as proof of purchase.

For technical assistance, parts, or service, please contact Hayward customer support or a certified Hayward service center. Contact information can typically be found on the Hayward website or in the product packaging.

9. ADDITIONAL RESOURCES

For further information on pool heating and maintenance, consider visiting the Hayward official website or consulting a local pool professional.

Visit the Hayward Store on Amazon

