

GeneralAire 1042LH

GeneralAire 1042LH Legacy Humidifier Instruction Manual

Model: 1042LH

1. PRODUCT OVERVIEW

The GeneralAire 1042LH Legacy Humidifier is a furnace-mounted, bypass-type humidifier designed to introduce moisture into your home's air. It operates by dispersing water evenly across a vapor pad. A portion of the heated air from your furnace passes through this water-soaked pad, absorbing moisture before being distributed throughout your living space. This process helps maintain optimal humidity levels for improved comfort and air quality.



Image 1.1: The GeneralAire 1042LH Legacy Humidifier shown installed on a furnace duct. The unit is white with a black base, featuring the GeneralAire logo. Wiring and water lines are visible connecting to the unit.

Key Features:

- Furnace mounted, 24 Volt operation with included 120V transformer.
- Suitable for homes up to 2800 Sq Ft.
- Reversible design for Right-Hand (RH) or Left-Hand (LH) 6-inch duct connection.
- Humidification capacity: 17 gallons per day (based on 120°F plenum temperature).
- Plenum opening dimensions required: 9 1/2 inches (H) x 13 5/8 inches (W).
- Unit dimensions: 14 inches (H) x 15 1/8 inches (W) x 9 inches (D).

2. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- GeneralAire 1042LH Legacy Humidifier Unit
- mhx3c manual-control duct mount Humidistat

- 120V Transformer (for 24V operation)
- Installation Hardware (refer to specific packing list for details)
- Humidifier Pad (pre-installed or separate)

3. INSTALLATION INSTRUCTIONS

This humidifier is designed for furnace-mounted bypass installation. Professional installation is recommended. Ensure all power to the furnace and humidifier circuit is disconnected before proceeding.

3.1 Site Selection

- Select a location on the furnace plenum or return air duct that allows for the required plenum opening of 9 1/2 inches (H) x 13 5/8 inches (W).
- Ensure sufficient clearance for maintenance and access to the unit.
- The unit is reversible for either right-hand or left-hand 6-inch duct connection. Plan the bypass duct routing accordingly.

3.2 Mounting the Humidifier

1. Using the provided template, mark and cut the plenum opening on the furnace duct.
2. Mount the humidifier securely to the ductwork, ensuring a tight seal to prevent air leaks.
3. Connect the 6-inch bypass duct from the humidifier to the return air duct.

3.3 Water Supply Connection

- Connect the humidifier to a cold water supply line using appropriate plumbing fittings.
- Install a saddle valve or a dedicated shut-off valve for the humidifier's water supply.
- Ensure all connections are watertight.

3.4 Electrical Wiring

- Wire the 24V humidifier to the included 120V transformer.
- Connect the humidistat to the humidifier and the furnace control board as per the wiring diagram in the full installation guide.
- All electrical connections must comply with local codes.

Note: Refer to the detailed wiring diagrams and instructions provided in the complete installation manual for your specific furnace model.

4. OPERATION

The GeneralAire 1042LH operates manually via the included duct-mounted humidistat. Once installed and connected, the humidifier will activate when the humidistat senses that the humidity level in your home is below the set point and the furnace fan is operating.

4.1 Setting the Humidistat

1. Locate the manual-control duct mount humidistat.
2. Turn the dial to your desired humidity level. A common starting point is 35-40% relative humidity.
3. Monitor your home's humidity and adjust the humidistat as needed for comfort.
4. During extremely cold weather, it may be necessary to lower the humidistat setting to prevent condensation on

windows.

When the humidistat calls for humidity, water flows to the distribution tray at the top of the humidifier, saturating the humidifier pad. As warm air from the furnace passes through the wet pad, it picks up moisture and distributes it throughout your home.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your GeneralAire 1042LH Humidifier.

5.1 Humidifier Pad Replacement

- **Frequency:** Replace the humidifier pad once or twice per heating season, depending on water quality and usage.
- **Recommended Pad:** Use only genuine GeneralAire 990-13 replacement pads.
- **Procedure:**
 - a. Turn off the water supply to the humidifier.
 - b. Disconnect power to the humidifier and furnace.
 - c. Remove the humidifier cover.
 - d. Carefully slide out the old humidifier pad and discard it.
 - e. Clean any mineral deposits from the humidifier's water distribution tray and drain pan.
 - f. Insert a new GeneralAire 990-13 replacement pad, ensuring it is correctly seated.
 - g. Replace the humidifier cover.
 - h. Restore water supply and power.

5.2 General Cleaning

- Periodically inspect and clean the water distribution tray and drain pan to remove mineral buildup.
- Ensure the drain line is clear and free of obstructions.
- If you have hard water, more frequent cleaning and pad replacement may be necessary.

6. TROUBLESHOOTING

This section provides solutions to common issues. For complex problems, consult a qualified HVAC technician.

Problem	Possible Cause	Solution
No humidity output	<ul style="list-style-type: none">• Humidistat set too low• No water supply• Power disconnected• Clogged humidifier pad• Furnace fan not running	<ul style="list-style-type: none">• Increase humidistat setting.• Check water supply valve.• Verify power connections and transformer.• Replace humidifier pad.• Ensure furnace fan is set to "AUTO" or "ON" and furnace is operating.
Water leakage	<ul style="list-style-type: none">• Loose water connections• Clogged drain line• Damaged humidifier housing	<ul style="list-style-type: none">• Tighten all water connections.• Clear any obstructions from the drain line.• Inspect housing for cracks; replace unit if damaged.

Problem	Possible Cause	Solution
Excessive humidity/condensation	<ul style="list-style-type: none">• Humidistat set too high• Outdoor temperature too low for current setting	<ul style="list-style-type: none">• Lower the humidistat setting.• Adjust humidistat based on outdoor temperature to prevent window condensation.

7. SPECIFICATIONS

Feature	Detail
Brand	GeneralAire
Model Name	1042LH
Type	Furnace Mount Bypass Humidifier
Voltage	24 Volts (with 120V transformer)
Humidification Capacity	17 Gallons per day (based on 120°F plenum temperature)
Coverage Area	Up to 2800 Square Feet
Operation Mode	Manual (via duct mount humidistat)
Plenum Opening (H x W)	9 1/2 inches x 13 5/8 inches
Unit Dimensions (H x W x D)	14 inches x 15 1/8 inches x 9 inches
Item Weight	12 Pounds
Color	White
Included Components	mhx3c manual-control duct mount Humidistat
Replacement Pad	GeneralAire 990-13

8. WARRANTY AND SUPPORT

For warranty information, technical support, or to purchase replacement parts, please refer to the official GeneralAire website or contact their customer service department. Keep your purchase receipt for warranty claims.

Note: *Specific warranty terms and conditions may vary. Always consult the documentation included with your product or the manufacturer's official resources for the most current information.*