

Supco UHS24

Supco UHS24 Universal Humidifier Solenoid Valve Instruction Manual

INTRODUCTION

The Supco UHS24 is a universal 24 VAC solenoid valve designed as a replacement for common humidifier valves. This valve is compatible with various humidifier models, including Aprilaire 4040, GeneralAire 990-53, Honeywell 32001639-002, and Skuttle A01-0814-148. It can be used with both copper and plastic tubing and includes an inline strainer on the inlet side. This manual provides instructions for proper installation, operation, maintenance, and troubleshooting.

SAFETY INFORMATION

- Always disconnect power to the humidifier and furnace before beginning any installation or maintenance.
- Turn off the water supply to the humidifier before disconnecting any water lines.
- Wear appropriate personal protective equipment, such as safety glasses and gloves.
- Ensure all electrical connections are secure and properly insulated.
- Verify all water connections are leak-free before restoring power and water supply.
- If you are unsure about any step, consult a qualified technician.

PACKAGE CONTENTS

The Supco UHS24 Universal Humidifier Solenoid Valve package includes:

- 1x UHS24 Solenoid Valve
- 2x 1/4" Compression x 1/8" MPT Fittings
- 1x 3/16" Barb x 1/8" MPT Fitting
- 1x 5/16" Compression x 1/8" MPT Fitting
- 1x 1/4" Insert for plastic tubing
- 1x 1/4" Delrin sleeve for plastic tubing

INSTALLATION

Tools Required

- Wrench (for fittings)

- Screwdriver (to remove/attach solenoid)
- Wire Stripper (for electrical connections)
- Plumber's Tape / Thread Sealant

Pre-Installation Steps

1. Disconnect power to the humidifier and furnace at the circuit breaker.
2. Close the compression valve on the water line supplying the humidifier.
3. Drain any remaining water from the humidifier system.
4. Carefully remove the old solenoid valve, noting the orientation of water inlet/outlet and electrical connections.

Installation Procedure

1. Select the appropriate fittings from the package that match your existing water lines (copper or plastic tubing).
2. Apply plumber's tape or thread sealant to the threads of the chosen fittings.
3. Thread the fittings into the inlet and outlet ports of the new UHS24 solenoid valve. Tighten securely but do not overtighten to avoid damage.
4. Mount the new solenoid valve in the same location and orientation as the old one. The valve can be reversed in its bracket if needed to accommodate water line direction.
5. Connect the water inlet line to the solenoid's inlet fitting. Ensure a tight, leak-free connection.
6. Connect the water outlet line to the solenoid's outlet fitting. Ensure a tight, leak-free connection.
7. Connect the two electrical wires from the humidifier control to the solenoid's terminals. The polarity does not matter for this 24 VAC solenoid. Ensure connections are secure.
8. Slowly open the water supply compression valve and check all water connections for leaks. Address any leaks immediately.
9. Restore power to the humidifier and furnace at the circuit breaker.
10. Activate the humidifier (e.g., by setting the thermostat to call for heat and humidity) to allow water to flow through the solenoid. Check for any leaks during operation.
11. Adjust the water flow rate if necessary, typically at the compression connector on the water supply line.



Image: Supco UHS24 Universal Humidifier Solenoid Valve with included fittings.

OPERATION

The Supco UHS24 solenoid valve operates automatically in conjunction with your humidifier's control system. When the humidifier calls for humidity, a 24-volt electrical signal is sent to the solenoid, causing it to open and allow water to flow to

the humidifier pad. When the humidity requirement is met or the humidifier cycle ends, the electrical signal is removed, and the solenoid closes, stopping the water flow.

MAINTENANCE

- **Regular Inspection:** Periodically inspect the solenoid valve and all water connections for any signs of leaks, corrosion, or damage.
- **Water Flow Check:** Ensure adequate water flow to the humidifier pad when the solenoid is open. Reduced flow can indicate a clogged inline strainer or supply line.
- **Strainer:** The valve includes a non-replaceable inline strainer on the inlet side. If water flow is consistently low, the strainer may be clogged. In such cases, the valve may need replacement.
- **Winterization/Seasonal Shutdown:** If shutting down the humidifier for an extended period, turn off the water supply to the humidifier and drain the system to prevent freezing or stagnant water issues.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No water flow to humidifier	• No 24V signal to solenoid • Clogged inline strainer • Closed water supply valve • Faulty solenoid valve	• Check humidifier control and wiring • Inspect and clear water supply line; consider valve replacement if strainer is clogged • Ensure water supply valve is fully open • Test solenoid for continuity; replace if faulty
Constant water flow (valve not closing)	• Solenoid stuck open • Debris in valve preventing closure • Constant 24V signal	• Disconnect 24V wires; if water still flows, replace solenoid • Check humidifier control for constant signal; repair control if necessary
Water leaks at connections	• Loose fittings • Insufficient plumber's tape • Damaged tubing or fittings	• Tighten fittings securely • Reapply plumber's tape and re-tighten • Replace damaged components
Low water flow	• Partially closed water supply valve • Partially clogged inline strainer • Restriction in water line	• Ensure water supply valve is fully open • Inspect and clear water supply line; consider valve replacement if strainer is clogged • Check for kinks or blockages in tubing

SPECIFICATIONS

Model Number	UHS24
Brand	Supco
Voltage	24 VAC
Material	Copper
Exterior Finish	Copper
Inlet Connection Type	Compression
Outlet Connection Type	Barb
Number of Ports	2
Item Weight	8.8 ounces
Package Dimensions	7.8 x 7.3 x 1.3 inches
UPC	687152213306

WARRANTY INFORMATION

Specific warranty details for the Supco UHS24 Universal Humidifier Solenoid Valve are typically provided at the point of purchase or within the product packaging. Please refer to the documentation included with your purchase or contact Supco directly for comprehensive warranty information.

CUSTOMER SUPPORT

For technical assistance, replacement parts, or further inquiries regarding the Supco UHS24 Universal Humidifier Solenoid Valve, please contact Supco customer support. Contact information can typically be found on the manufacturer's official website or product packaging.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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Email

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question