

HE420A,B and HE460A,B Steam Power Humidifiers

PRODUCT DATA



FEATURES

- Humidifies the air without a call for heat from the thermostat so relative humidity fluctuates less, optimizing homeowner comfort.
- Ideal for homes with extensive woodwork, hardwood floors, antiques, oil paintings, leather furniture, pianos, and fine collectibles.
- Capable of humidifying a large area.
- Compact size allows easy installation.
- Minimal amount of water needed for energy efficient operation.
- Low water cut-off switch and built-in overflow protection are integral safety features.
- Automatic Flushing Timer reduces frequency of maintenance in a hard water installation.
- Includes easy-to-use humidity control that mounts on the wall or duct for more installation flexibility.
- Perfect Climate Comfort Center™ control can be installed to replace both the thermostat and humidity control for improved aesthetics and convenience.

APPLICATION

The HE420A,B and HE460A,B Steam Power Humidifiers use a thermal fan interlock control to provide humidification for the whole house. The steam power humidifier is designed to work with high efficiency furnaces, heat pumps and set back thermostats. The humidifiers work with virtually any Honeywell humidity control, but use the Honeywell Perfect Climate Comfort Center™ control for optimal performance.

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SPECIFICATIONS

Capacity:

HE420A,B: 13 gallons per day (gpd) or 49 liters per day (lpd).
 HE460A,B: 17 gallons per day (gpd) or 64 liters per day (lpd).

Humidified Area:

For precise sizing and product selection, use Honeywell's HumidiCalc™ Humidifier Sizing Software. If unavailable, refer to Table 1.

Internal Heating Source:

Incoloy® sheathed element:
 HE420A,B: 120 Vac, 1.5 kW, 12.5A.
 HE460A,B: 240 Vac, 2.0 kW, 8.3A.

Duct Opening (Height x Width):

8 in. x 10 1/2 in. (203 mm x 267 mm).

Dimensions:

Refer to Fig. 1.

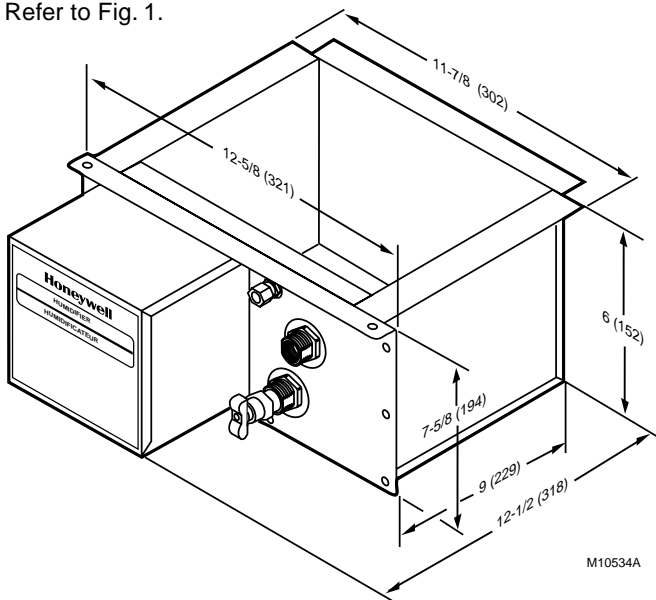


Fig. 1. Dimensions of HE420A,B/HE460A,B in in. (mm).

Approvals:

Underwriters Laboratories Inc.: Listing 42U8.
 Canadian Underwriters Laboratories Inc.: Listing 42U8.

Standard:

Air Conditioning and Refrigeration Institute Tested:
 Standard 610

Models:

HE420A TRADELINE® and HE460A TRADELINE® Steam Power Humidifier package includes mounting template and hardware, H908A Humidity Control, HC40 Automatic Flushing Timer with chlorine removal filter.

HE420B TRADELINE® and HE460B TRADELINE® Steam Power Humidifier package includes mounting template and hardware, H1008A Automatic Humidity Control, HC40 Automatic Flushing Timer with chlorine removal filter.

Accessories:

C7089H Outdoor Temperature Sensor.
 H1008A Automatic Humidity Control with HumidiCalc™ Software (software calculates dewpoint to prevent moisture condensation).
 H908A Convertible Humidity Control.
 HumidiCalc™ Humidifier Sizing Software (software calculates required humidifier capacity for application).
 PC8900 Perfect Climate Comfort Center™ Control.

Table 1. Size Of Area That Can Be Humidified.

House Description	Air Changes Per Hour	HE420 Area (Up To)		HE460 Area (Up To)	
		Sq. ft	Sq. m	Sq. ft	Sq. m
Loose	Two	1,415	131	1,845	171
Average	One	1,970	183	2,575	239
Tight	One-half	3,095	288	4,045	376

ORDERING INFORMATION

When purchasing replacement and modernization products from your TRADELINE® wholesaler or distributor, refer to the TRADELINE® Catalog or price sheets for complete ordering number.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

1. Your local Home and Building Control Sales Office (check white pages of your phone directory).
2. Home and Building Control Customer Logistics
 Honeywell Inc., 1885 Douglas Drive North
 Minneapolis, Minnesota 55422-4386 (612) 951-1000

In Canada—Honeywell Limited/Honeywell Limitée, 155 Gordon Baker Road, North York, Ontario M2H 3N7.
 International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

INSTALLATION

IMPORTANT

Read all the installation instructions before installing the humidifier.

Select Location and Mount

There are three typical ways of mounting the steam humidifier:

- horizontally under at least a 10 in. (254 mm) wide duct using the mounting bracket (preferred mounting);
- horizontally under a reinforced duct;
- horizontally under a duct extension using the mounting bracket.

Decide which mounting is appropriate and follow those mounting instructions. See Fig. 2 through 4.

Select a location where the humidifier can be plugged in without an extension cord. The preferred installation location is on the warm air side of the furnace. If that location is not possible, mount the humidifier a minimum of 6 ft (1.8m) upstream from the furnace filter. Depending on the location selected, additional duct reinforcement may be necessary because the humidifier weighs 18 lb when filled with water.

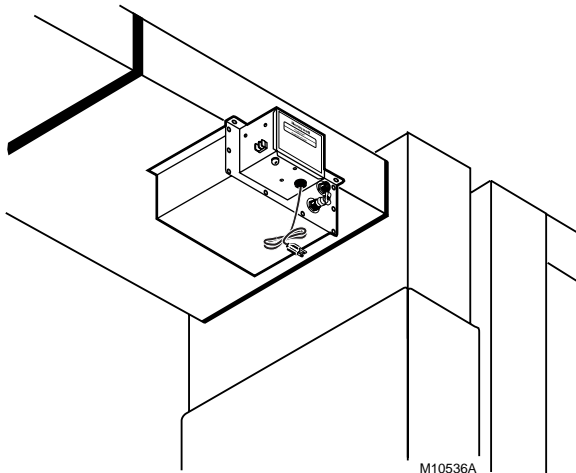


Fig. 2. Mounting humidifier horizontally under duct using mounting bracket.

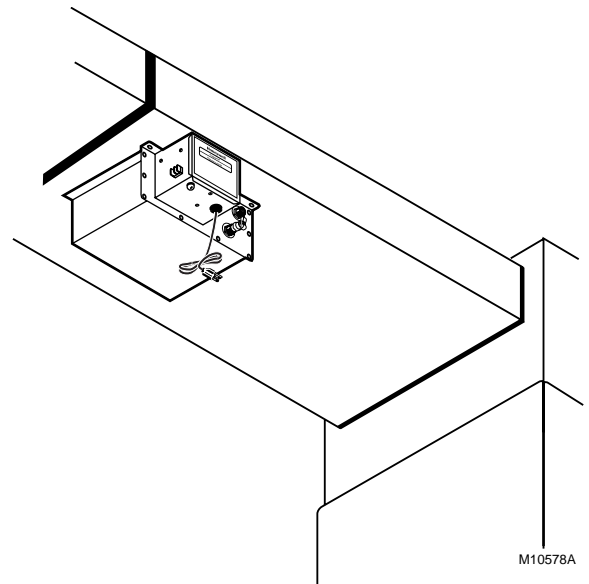


Fig. 3. Mounting humidifier horizontally under duct.

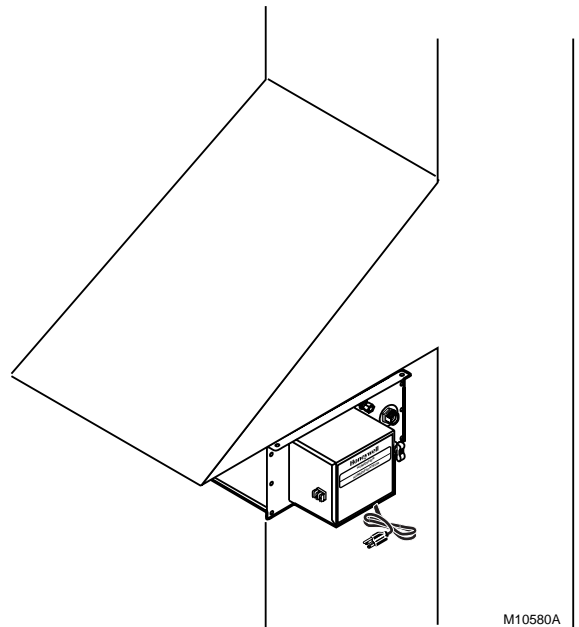


Fig. 4. Mounting humidifier horizontally under duct extension using mounting bracket.

WARNING

Electrocution, Heavy Equipment and Chemical Hazard.

Can cause death, blindness, water damage to home and heater failure.

- Do not cut into any air conditioning or electrical line.
- Mount the humidifier in a level position to avoid water damage and heater failure.
- Wear safety glasses when cutting or drilling.
- Reinforce duct as necessary to ensure stability.

CAUTION

Steam Condensation, Fire and Freezing Water Hazard.

Can cause failure of fan or limit control or result in water damage to home.

- Do not install the humidifier where the sidewalls of the return air duct are constructed of wood (i.e., floor joist).
- Do not install the humidifier where the temperature is lower than 32°F (0°C) or higher than 200°F (93°C).

Mount Horizontally Using Mounting Bracket (Preferred Mounting Method)

IMPORTANT

The duct must be at least 10 in. (254 mm) wide to use this mounting method.

The duct is the strongest when using the bracket mounting method because the least amount of duct reinforcement is required because of the bracket location. However, reinforcement may still be necessary to help support the weight of the humidifier and keep it level.

1. Tape the template 1/2 in. (13 mm) from the edge of the duct and trace around the template. See Fig. 5.
2. Drill a 3/8 in. (10 mm) hole within the center portion of the template.
3. Use tin snips to cut around the outline of the template.

IMPORTANT

Follow the dotted line carefully.

4. Remove the template and sheet metal.
5. Cut two 8 in. (203 mm) pieces of the S-cleat (provided).
6. Place the S-cleat pieces on the narrow sides of the rectangular opening so the opening (slot) protrudes down and out of the duct.

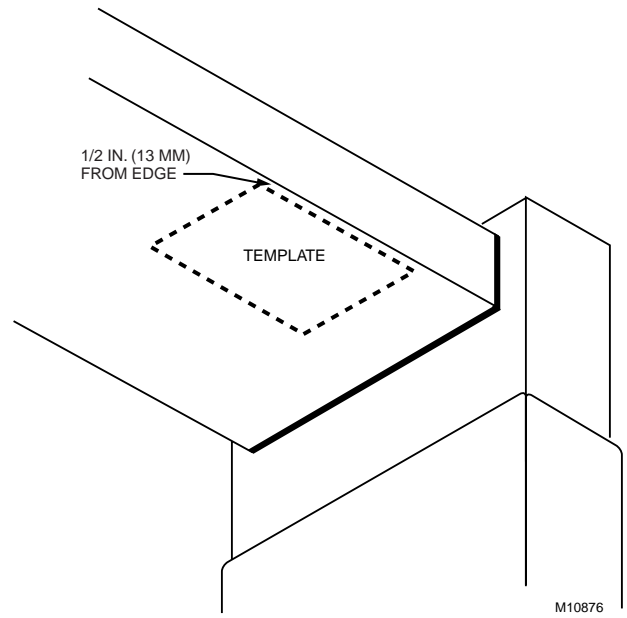


Fig. 5. Position template.

7. Cut a 10-1/2 in. (267 mm) piece of S-cleat.
8. Place the 10-1/2 in. (267 mm) piece of S-cleat on the long side of the rectangular opening closest to the center of the duct so the opening (slot) shows below the duct.
9. Use two 8-32 screws and nuts (provided) to attach the mounting bracket (L shaped with six holes) to the top/front surface of the humidifier. The humidifier is now ready for mounting.

NOTE: Position the humidifier so the upward protrusion of the U is on the side toward the reservoir.

IMPORTANT

Do not mount the humidifier until the water level is adjusted. See Set The Water Level section.

10. Slide the humidifier tabs into the installed S-cleat. Be sure the back tab engages completely with the S-cleat and the mounting bracket touches the side of the duct.
11. Using the mounting bracket as a guide, drill three 7/64 in. (3 mm) holes through the duct.
12. Secure the humidifier to the duct with three of the no. 8 sheet metal screws (provided).

Mount Horizontally on Reinforced Duct

This horizontal mounting method usually requires duct reinforcement to support the weight of the humidifier and keep it level. See Fig. 3. The mounting bracket is not used.

1. Tape the template to the bottom of the duct in the desired location.
2. Drill a 3/8 in. hole (10 mm) within the center portion of the shaded area.
3. Use tin snips to cut around the outline of the template.

IMPORTANT

Follow the dotted line carefully.

4. Remove the template and sheet metal.
5. Cut two 8 in. (203 mm) pieces of the S-cleat (provided).
6. Place the S-cleat pieces on the narrow sides of the rectangular opening so the opening (slot) protrudes down and out of the duct.
7. Cut a 10-1/2 in. piece of S-cleat.
8. Place the 10-1/2 in. (267 mm) piece of S-cleat on the long side of the rectangular opening, opposite the two holes previously drilled. Position so the opening (slot) protrudes down and out of the duct.

IMPORTANT

Do not mount the humidifier until the water level is adjusted. See the Set The Water Level section.

9. Slide the humidifier tabs into the installed S-cleat. Be sure the back tab engages completely with the S-cleat.
10. Secure the humidifier to the duct with two no. 8 sheet metal screws (provided).

Mount Horizontally on Vertical Duct

Horizontal mounting on a vertical duct requires the installation of a duct extension. See Fig. 4. Additional duct reinforcement may also be necessary to help support the weight of the humidifier and keep it level.

Create and install the duct extension. Then follow steps 1 through 12 in the Mount Horizontally Using Mounting Bracket section to complete installation.

WIRING

All wiring must comply with local codes and ordinances. When selecting a location for mounting the humidifier, be sure connections can be made to the power source without using an extension cord.

⚠ WARNING

**Voltage or Fire Hazard.
Can Cause Death or Fire.**

Use a receptacle rated at 120 Vac, 15/20A (NEMA configuration 5-15R) for the HE420A,B Humidifiers. Use a receptacle rated at 240 Vac, 15/20A (NEMA configuration 5-15R) for the HE460A,B Humidifiers.

Air Mover Applications

⚠ CAUTION

**Moisture Condensation and Wiring Hazard.
Moisture can destroy furnace electronic controls
and miswiring can burn out electrical
components.**

- Do not alter any of the heating and cooling system functions.
- Be sure to wire only the system fan.

Refer to the wiring diagrams in Fig. 6 through 8 for typical air mover applications.

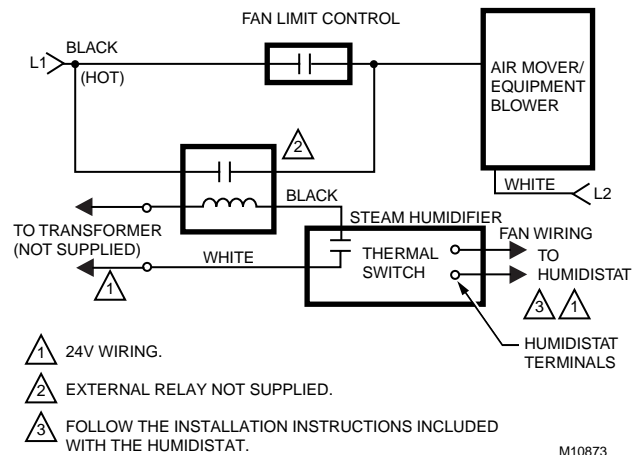


Fig. 6. Typical wiring diagram for humidifier in single-speed air mover applications without air conditioning (switching through external relay).

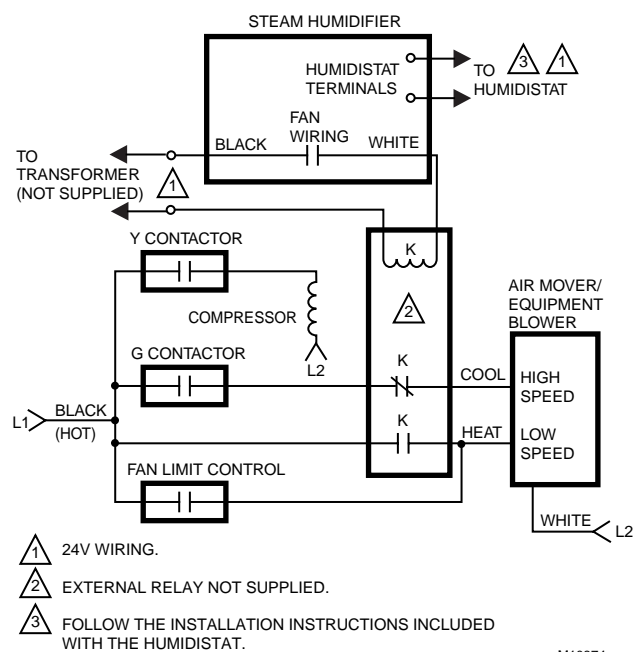


Fig. 7. Typical wiring diagram for humidifier in dual-speed air mover applications with air conditioning.

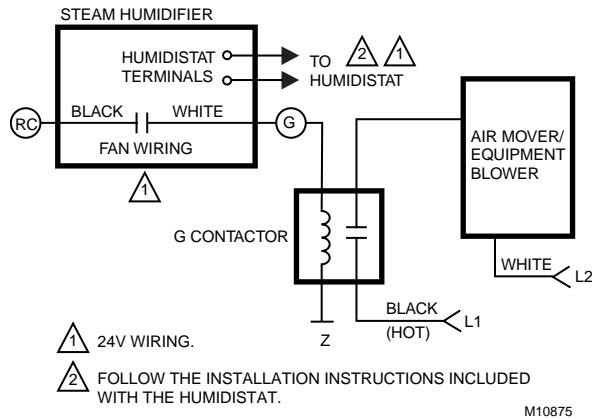


Fig. 8. Typical wiring diagram for humidifier in single-speed air mover applications without air conditioning (switching through G contactor).

The humidifier has a sealed switch with a thermostatic sensor that is designed only for pilot duty (low voltage) applications. The sealed switch is attached to the humidifier wall. The switch is preset to turn on the fan when the water temperature is 170°F (77°C) and turn off the fan when the water temperature falls below 120°F (49°C).

IMPORTANT

The Honeywell S688A Fan Sail Switch must be installed if the system fan is on continuously.

Heat Pumps

No wiring diagrams can be suggested due to the many variations and wiring complexity of heat pumps. If the humidifier control fan operation is desired, be sure to design a safe control circuit using equipment diagrams and tracing the equipment wiring.

In heat pump installations, a fan sail switch must be installed due to the almost continuous operation of the system fan. Wire the fan sail switch in series with the low voltage humidity control circuit so the humidifier is on only when the fan is operating; however, the humidifier, in most cases, does operate in conjunction with the system fan.

PLUMBING HUMIDIFIER

CAUTION

Chemical Hazard.
Can cause damage to environment or air conditioning system.
 Do not use any refrigerant line connected to an air conditioner.
 Be sure to install the chlorine removal filter (provided) to prevent humidifier corrosion.

Either hard or soft water can be used in the humidifier.

IMPORTANT

Use only copper tubing to plumb the humidifier.

1. Locate the cold water pipe closest to the humidifier.
2. Install the saddle valve connector.
3. Use the valve instructions to install the valve (provided). The valve is self-piercing when installed on copper pipe.

IMPORTANT

*Position the valve so water flows from the top or side to reduce the chance of clogging the valve with minerals.
 Lightly clean the copper tubing ends with fine sandpaper before making any connections.*

4. Install the chlorine removal filter.
5. Place the brass compression nut over the copper tubing.
6. Slide the brass ferrule over the tubing.

NOTE: Do not overtighten the compression nut. Moderate tightness prevents leaking.

7. Insert the tubing into the valve fitting and tighten the compression nut.
8. Flush the copper tubing to remove any debris that can cause problems at the float valve.

SET WATER LEVEL

Adjust the humidifier water level prior to mounting.

1. Set the humidifier reservoir on a level surface.
2. Attach the water feed line and allow the unit to fill until the float valve shuts off the incoming flow of water. The water level should be between 2-1/4 in. (57 mm) and 2-1/2 in. (64 mm) deep. If water level is correct, go to step 4.
3. Adjust the water level in small increments. Raise the water level by pushing down on the center of the float arm. Lower the water level by pressing the float down with one hand and pulling up on the center of the float arm with the other hand. See Fig. 9.

CAUTION

Flooding Hazard.
Inadequate support of the float arm can lead to valve seat damage and result in water leakage.
 Support the float arm during adjustment.

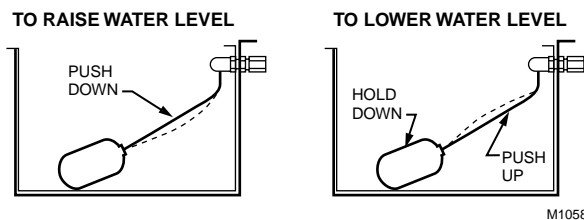


Fig. 9. Adjust water level.

4. Verify the water level by removing enough water to allow the float valve to automatically fill and shut off the water.

FINISH MOUNTING AND PLUMBING HUMIDIFIER

1. Mount humidifier as instructed in the Select Location and Mount section.
2. Route the tubing to the humidifier float valve.
3. Connect the remaining end of the tubing to the humidifier float valve.
4. Open the saddle valve so that the water flows slowly into the water pan.
5. Check the compression fittings at the saddle valve and the float valve. Tighten the fitting slightly to stop any leakage.

IMPORTANT

Keep all drain lines away from sharp edges.

6. Connect the overflow provision of the humidifier to a suitable waste drain.

NOTE: A 5/8 in. (16 mm) ID garden hose can be easily attached to the overflow fitting.

7. Support the drain line at several locations to prevent kinks. Be sure to provide support near any heat source.
8. Use a male 1-1/2 in. NPT fitting (not supplied) to connect the overflow provision of the humidifier.

INSTALLING HC40 AUTOMATIC FLUSHING TIMER

IMPORTANT

All plumbing and electrical connections must comply with all local codes and ordinances for the area.

Location



CAUTION

Flooding Hazard.
Improper location of drain tubing can cause water damage to home.

- Drain tubing must not kink or contact sharp edges or hot surfaces.
- Slope drain tubing downward for correct drainage.

Choose an appropriate location for the timer mounting before installing the HC40 Automatic Flushing Timer. See Fig. 10. The timer must be located:

- Near waste drain for disposal of flushing water.
- At a maximum distance of 5 ft (1.5m) from a fused electrical outlet.
- At a maximum distance of 3 ft (0.9m) from the humidifier.

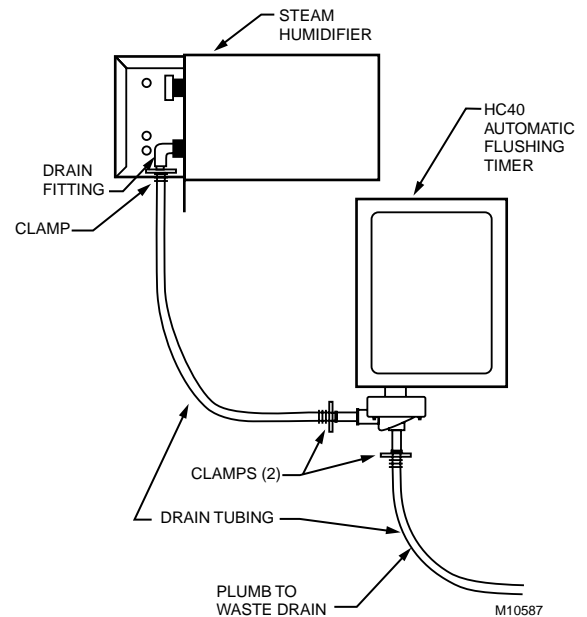


Fig. 10. Typical installation of automatic flushing timer on HE420A,B, HE460A,B Humidifiers.

Mounting and Plumbing

IMPORTANT

Some installations require additional fittings. Be sure all fittings are brass or stainless steel to prevent corrosion.

1. Remove the timer cover.
2. Use screws to attach the timer to the mounting surface.
3. Replace the timer cover.
4. Cut a piece of drain tubing to connect the humidifier fitting to the timer fitting.



CAUTION

Flooding Hazard.

Improper location of drain tubing can cause water damage to home.

Drain tubing must not kink or contact sharp edges or hot surfaces.

5. Cut a second piece of tubing to reach from the flushing unit to the drain.
6. Use clamps or suitable fittings to connect the tubing to the humidifier and drain.
7. Return the humidifier to its normal operating mode and properly adjust the water level.
8. Plug the timer into the electrical outlet.
9. Verify the timer operation by activating the humidifier with an appropriately sized coin. Turn the plastic indicator clockwise very slowly. See Fig. 11.

NOTE: This activates the drain valve and allows water to flow from the unit to the drain.

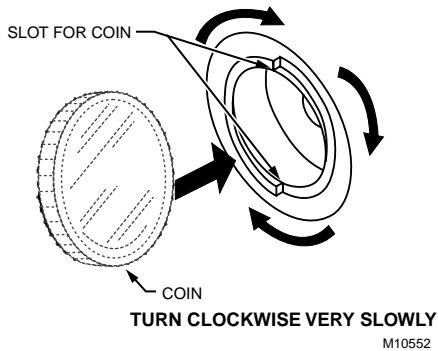


Fig. 11. Turn plastic indicator on timer side.

10. Check all fittings for leaks; tighten if necessary.
11. Allow the timer to run for one complete cycle (7-1/2 minutes). This assures that proper cycle time was obtained.

NOTE: Complete the installation before activating the timer. Some vibrating noise occurs when there is no water. The noise stops when water is present.

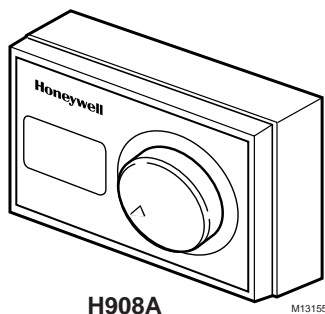
CHECKING THE INSTALLATION

After installation is complete, use the following procedure to check the humidifier operation:

1. Turn on the humidifier water supply.
2. Be sure the humidifier has power and plug in the humidifier.
3. Turn the Convertible Humidity Control to the highest setting, or the H1008 Automatic Humidity Control to the Test position.
4. Check that the furnace blower comes on to circulate the moist air. The blower may take as long as fifteen minutes to turn on.
5. Reset the Convertible Humidity Control to a comfortable setting, or the Automatic Humidity Control to the desired frost factor setting for automatic operation.

OPERATING THE HUMIDIFIER

The HE420A and HE460A Humidifiers are controlled by the Convertible Humidity Control that is installed either on the interior wall in the living area or on the return air duct. Choose the humidity control setting using the combination relative humidity/outdoor



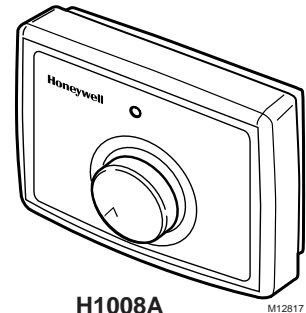
temperature setting scale on your humidity control. Match the dial setting to the outdoor temperature to optimize the humidity level while reducing the moisture condensation on your windows. Use Table 2 to adjust the humidity control to the recommended setting.

NOTE: As the outside temperature drops, lower the recommended setting to accommodate the effects of dewpoint. These settings should reduce the accumulation of moisture and ice on the windows and in other areas of the house.

Some indoor activities such as cooking, showering and clothes drying can cause excessive levels of humidity and start the accumulation of moisture on the windows.

NOTE: If this condition persists for more than a few hours, set the humidity control to the lowest setting to turn off the humidifier. If the condition does not improve, ventilate the house to remove the moisture.

Your Honeywell HE420B and HE460B Humidifiers are controlled by the Honeywell H1008 Automatic Humidity Control with HumidiCalc™ Software. The automatic humidity control is mounted in the return air duct where it can be exposed to the air stream of the return air. The HumidiCalc™ Software inside your automatic humidity control is designed to automatically adjust the humidity level based on indoor temperature and humidity, inferred or measured outdoor temperature, and the setting of the frost factor dial. The frost factor allows for variations in furnace size, window insulation and average daily climate temperature.



The Automatic Humidity Control with HumidiCalc™ Software requires an initial adjustment period. Set the frost factor dial on 5 and use Table 3 to adjust the frost factor—only one setting at a time—increasing the dial setting if you feel you need more humidity, or reducing the setting if you see moisture on the inside of your windows. For more precise humidity adjustment, set the frost factor between dial settings. Allow two days for the humidity level to subside before making further adjustments. Once you have tuned in the proper setting, you should not have to further adjust it again. HumidiCalc™ Software takes over and makes any future adjustments caused by varying outdoor temperatures, thus reducing moisture buildup on windows while maintaining the optimal humidity level.

Table 2. Recommended Convertible Humidity Control Settings.

At Outside Temperature	Recommended Setting	At Outside Temperature	Recommended Setting
-20°F (-29°C)	15	+10°F (-12°C)	30
-10°F (-23°C)	20	+20°F (-7°C)	35
0°F (-18°C)	25	Above 20°F (-7°C)	40

Table 3. Recommended Frost Factor Settings.

Humidity Level	Recommended Adjustment
Insufficient humidity	Increase the frost factor dial by one setting.
Condensation on windows	Decrease the frost factor dial by one setting.

OPERATION

The HE420A,B and HE460A,B Humidifiers use the principle that hot water creates water vapor. As dry air and vapor mix, the relative humidity of the air rises. The humidity control monitors the relative humidity and activates the humidifier accordingly.

When the humidity control calls for humidity, the humidifier underwater heater starts heating the water in the humidifier reservoir. When the water is warm enough, the humidifier activates a relay that turns on the furnace fan. The warm dry air from the furnace picks up the water vapor and circulates it through the home. The fan continues to circulate the air until the water cools down and then turns off the fan.

Humidified air feels warmer and more comfortable so you may be able to lower the thermostat heating setpoint and save money on heating fuel bills giving you a more comfortable environment that is also energy efficient.

MAINTENANCE

A regular maintenance program prolongs the life of the humidifier and provides a more comfortable environment. Frequency of cleanings depends on water conditions. Either hard or soft water can be used in the humidifier, but hard water mineral deposits are more difficult to clean.



CAUTION

Voltage Hazard.
Can cause electrical shock and equipment damage.
 Disconnect power supply before installing or servicing.

IMPORTANT

Never oil any part of the humidifier.

Every 1 to 4 Months (Depending on Water Quality)

Use the following procedure and refer to Fig. 12 to clean the humidifier:

1. Unplug the humidifier and fan control.
2. Disconnect the humidity control wires from the external screw terminals on the humidifier.
3. Turn off the water supply.

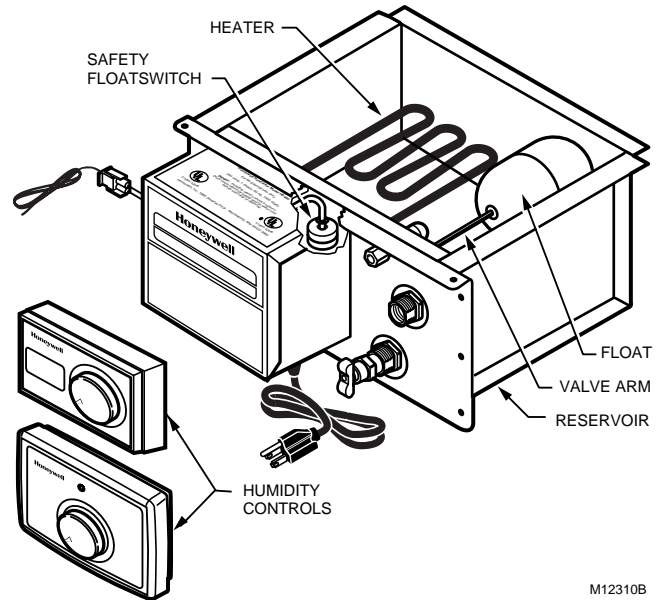


Fig. 12. Location of humidifier parts.

4. Disconnect water feed tubing at the float valve.
5. Disconnect the overflow at the humidifier.

IMPORTANT

Allow water to cool before continuing.

6. Use an appropriate coin and very slowly turn the automatic flushing timer indicator clockwise. See Fig. 13. Allow the humidifier to drain completely.

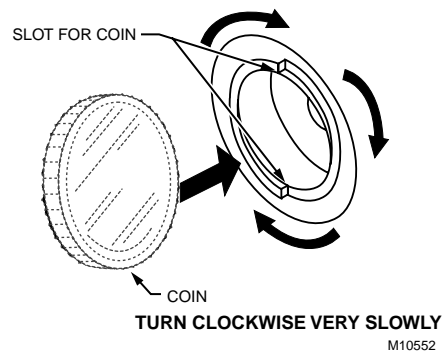


Fig. 13. Turn automatic flushing timer indicator clockwise.

7. Remove the humidifier from the mounting.
8. Use running tap water to flush loose minerals from the reservoir.
9. Carefully rub off minerals from the float, heater and safety float switch.

NOTE: Steel wool or other scouring pads can be used on the reservoir walls and other parts.

10. Remove the valve arm by pulling out the center pin attachment. Inspect the arm for mineral buildup and deterioration.

IMPORTANT

- Replace the float valve when it shows any signs of deterioration.
- The float valve should shut off the water at 2-3/8 in. (60 mm).

11. Reset the water level:



CAUTION

Flooding Hazard.
Inadequate support of the float arm can lead to valve seat damage resulting in water leakage.
 Support the float arm during adjustment.

- Set the humidifier reservoir on a level surface.
 - Attach the water feed line and allow the unit to fill until the float valve shuts off the incoming flow of water. The water level should be between 2-1/4 in. (57 mm) and 2-1/2 in. (64 mm) deep. If water level is correct, go to step d.
 - Adjust the water level in small increments. Raise the water level by pushing down on the center of the float arm. Lower the water level by pressing the float down with one hand and pulling up on the center of the float arm with the other hand. See Fig. 9.
 - Verify the water level by removing enough water to allow the float valve to automatically fill and shut off the water.
- Remount the humidifier.
 - Reconnect all plumbing connections.
 - Reconnect all electrical connections.
 - Verify humidifier operation by following the steps in the Checkout Procedures section.

End of Humidification Season

Clean and shut off the humidifier at the end of the heating season. Use the Every 1 To 4 Months section, steps 1 through 14, to shut down for the season.

TROUBLESHOOTING

Refer to Table 4 for troubleshooting procedures.

Table. 4. Troubleshooting Procedures.

Problem	What To Look For	What To Do
Low humidity	Furnace blower not operating.	<ul style="list-style-type: none"> • Reset circuit breaker or check for blown fuse. • Check that the furnace power is on. • Check all external wiring connections. • Check the humidity control setting. • Call a professional heating contractor.
	Rapid air changes. Drafts (cold air is dry and is an added load for the humidifier).	<ul style="list-style-type: none"> • Keep doors and windows closed. • Close fireplace damper when not in use. • Keep exhaust fan running time to a minimum. • Seal around doors and windows.
High humidity	Condensation on walls.	<ul style="list-style-type: none"> • Turn off humidity control and water until condensation is completely evaporated.
	Heavy condensation on windows.	<ul style="list-style-type: none"> • Turn humidity control down low enough to eliminate condensation caused by moisture from bathing, mopping, cooking, etc. If moisture persists, more ventilation is needed.

IMPORTANT

Be sure the humidifier power is off and there is no water in the humidifier.

Vacation

When you leave on vacation, turn off the humidifier water supply and the humidity control. When you return, turn on the humidifier water supply and reset the humidity control to restart the humidifier.

CHECKOUT PROCEDURES

After winter start-up or maintenance, use the following procedure to check humidifier operation:

- Turn on the humidifier water supply.
- Be sure the humidifier has power and plug in the humidifier.
- Turn the Convertible Humidity Control to the highest setting, or the H1008 Automatic Humidity Control to the Test position.

NOTE: The H1008A Automatic Humidity control stays in the test mode for thirty minutes. After thirty minutes, the control automatically resets to the maximum frost factor setting. If system checkout was not completed in thirty minutes, extend the test mode by turning the dial back to one of the dial settings and then returning it to the test mode.

- Check that the furnace blower turns on to circulate the moist air. The blower may take as long as fifteen minutes to turn on.
- Reset the Convertible Humidity Control to a comfortable setting, and the Automatic Humidity Control to the desired frost factor setting for automatic operation.

REPLACEMENT PARTS

Refer to Fig. 14 and Table 5 when ordering replacement parts.

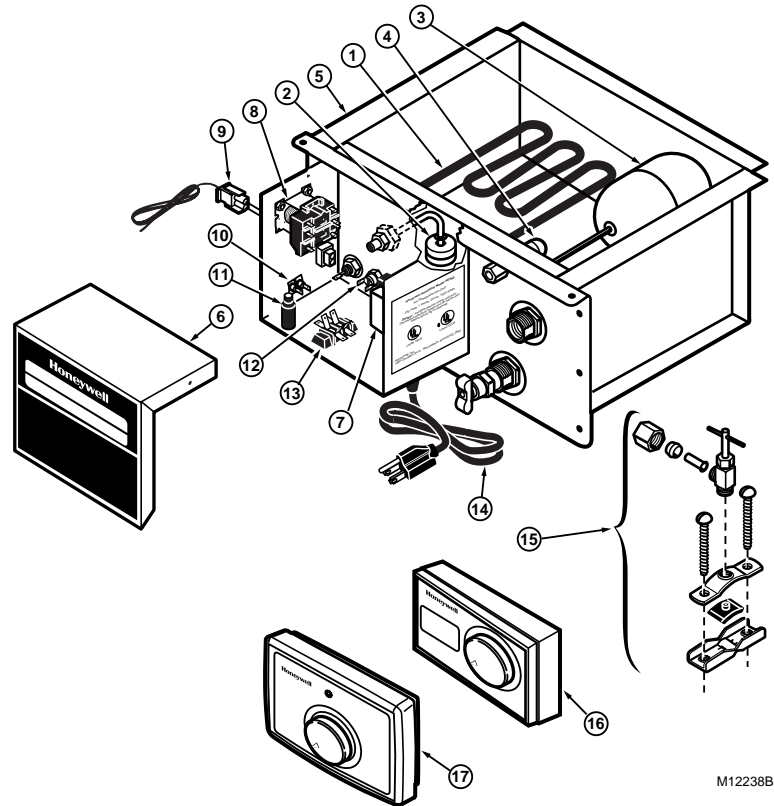


Fig. 14. Exploded view of humidifier parts.

Table 5. List of Replacement Parts for HE420A,B, HE460A,B Humidifiers.

Exploded View Number	Description	HE420 Part Number	HE460 Part Number
1	Incoloy® sheathed heating element	32000164-001	32000148-001
2	Safety float switch	32000149-001	32000149-001
3	Float for water fill valve	32000166-001	32000166-001
4	Water fill valve	32000167-001	32000167-001
5	Water pan assembly	32000152-001	32000152-001
6	Electrical enclosure cover	32000169-001	32000153-001
7	Transformer, 24 Vac	AT120B1010	AT120B1069
8	Control relay, dpst, 24 Vac	R8222C1008	R82222C1008
9	Fan wiring assembly	32000156-001	32000156-001
10	Humidistat control terminal block	32000157-001	32000157-001
11	Indicator light	32000158-001	32000158-001
12	Thermal fan switch	32000159-001	32000159-001
13	Power distribution block	32000160-001	32000160-001
14	Power supply cord with strain relief	32000177-001	32000161-001
15	Saddle valve assembly	32001616-001	32001616-001
16	Convertible Humidity Control	H908A1003	H908A1003
17	Automatic Humidity Control	H1008A1008	H1008A1008
—	Automatic Fushing Timer	HC40A1009	HC40A1009

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