

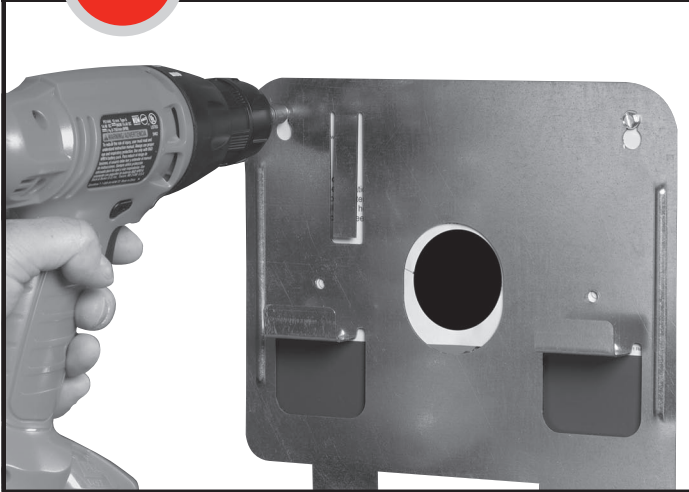
## TrueSTEAM

As Easy as 1-2-3-4

### PROFESSIONAL INSTALLATION GUIDE

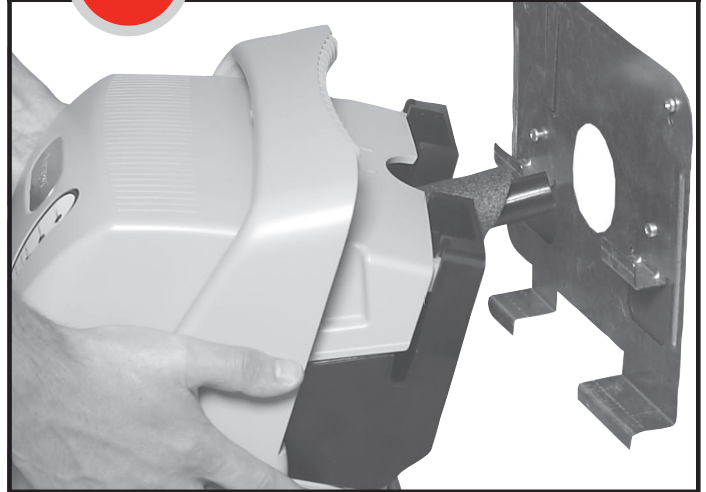
**1**

**Mount**



**2**

**Hang**



**3**

**Plumb**



**4**

**Wire**



See inside for detailed instruction and remote mounting options!



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### Need Help?

For assistance with this product please visit <http://yourhome.honeywell.com>  
or call Honeywell Customer Care toll-free at **1-800-468-1502**

## Read and save these instructions.

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## WHAT YOU WILL NEED TO INSTALL TRUESTEAM

### Tools:

- Wire stripper/cutter
- Drill or duct-cutting tool
- 1-3/4-in. hole saw
- 1/8-in. drill bit
- Phillips and slotted (or Torx) screwdriver

### Materials:

- 1/4-in. copper or plastic water line
- Water line connectors
- 1/2-in. drain hose and clamps
- 18-gauge thermostat wire (5 or 2 conductor)
- Mounting bracket and hardware
- In-line water filter\* (50028044-001)
- Saddle valve

### Options:

- Remote Installation Kits
  - 10-foot hose and nozzle kit (50024917-001)
  - 20-foot hose and nozzle kit (50024917-002)
- Humidity Controls
  - Manual Humidistat (H8908ASPST)
  - TrueIAQ (DG115EZIAQ)
  - VisionPRO IAQ (YTH9421C1002)
- Water line T-fitting
- Manual shut-off valve
- Remote hose P-trap
- Air pressure switch (50027910-001)



\* Warranty requires in-line water filter installation with regular service.

## SAFETY PRECAUTIONS



**CAUTION: Voltage Hazard.**

Can cause electrical shock or equipment damage.  
Disconnect HVAC equipment before beginning installation.

### Safety Precautions

Do not direct the steam nozzle at people.

If used near a pool or spa, ensure the TrueSTEAM can not fall into the water or be splashed. Also, ensure the TrueSTEAM is plugged into a GFI ground fault interrupt outlet.



**Warning: Electrocution, Heavy Equipment, and Chemical Hazard.**

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

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

The preferred installation location is on the warm or supply side of the furnace. If that location is not possible, the steam nozzle should be inserted a minimum of 12 in. upstream of the furnace filter. Depending on the location and the duct rigidity, additional duct reinforcement may be necessary.



**Warning: 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 ambient temperature is lower than 32°F (0°C) or higher than 104°F (40°C).
- Do not install the humidifier where the sidewalls of the return air duct are constructed of wood (e.g., floor joist).
- The mounting area must be strong enough to support the humidifier's weight when it is full of water (approximately 12 to 15 lbs.), and to hold the humidifier in a level position for safe, reliable operation. Otherwise, additional duct or wall reinforcement will be necessary.
- If the ducting has exposed insulated materials on the interior, ensure the nozzle extends beyond the insulation by clearing away excess insulation at the insertion point. You may wish to replace a section of insulated duct (approximately 6 in. x 6 in.) with rigid, non-insulated sheet metal to ensure effective installation.
- Mount the unit where it will have smooth air flow across the end of the steam nozzle.
- Allow at least 1 foot clearance to ventilation holes in humidifier's cover. Do not cover these holes. Covering them can increase the internal operating temperature of the humidifier and shorten the humidifier's life.
- Allow at least 4 inches of clearance between the steam nozzle insertion hole and the top of the interior duct to avoid condensation forming. The mounting template is designed to allow clearance if the top of the template is at or below the top surface of the interior duct.
- Do not mount to duct board.
- Do not install in completely enclosed spaces, such as a cabinet or unventilated closet. Choose a location that is well ventilated.

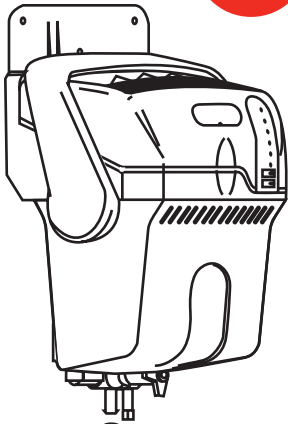
If installing the humidifier directly to the supply duct, follow steps on pages 3–4 and 11–16.  
 If mounting remote from the duct, follow steps on pages 5–16.

## DUCT MOUNT INSTALLATION

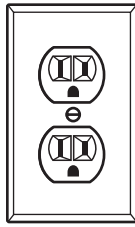
**1**

Choose a location that has access to a:

- Drain allowing a slope of 1/4 in. per foot of drain hose.
- Cold water line.
- Electrical circuit rated to your humidifier.
- Vertical surface with adequate clearances.



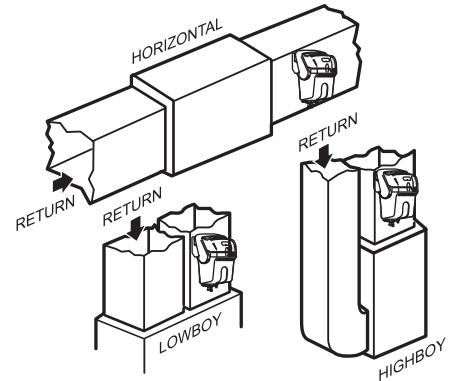
Continuous  
downslope



M24745



M24744



M24914

### Model

### Required Minimum Circuit Capacity

HM506

7 Amps

HM509

10 Amps

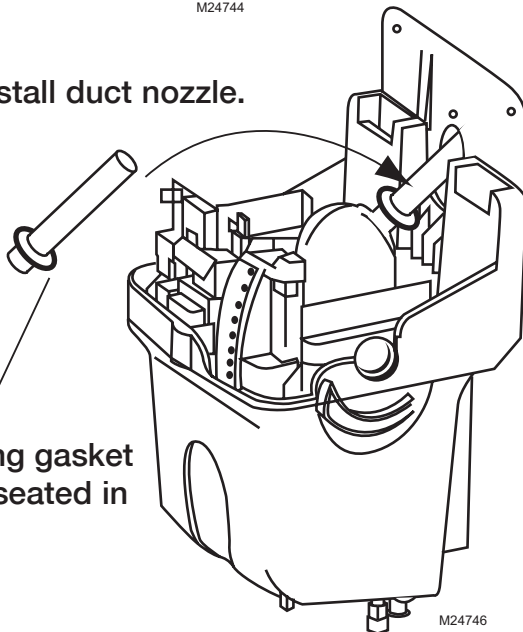
HM512

12 Amps

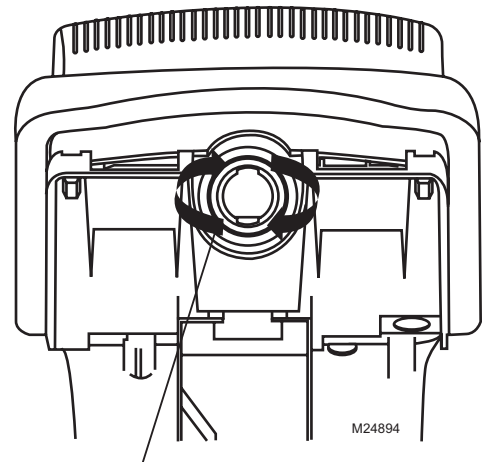
**2**

Install duct nozzle.

Ensure o-ring gasket  
is properly seated in  
the groove.



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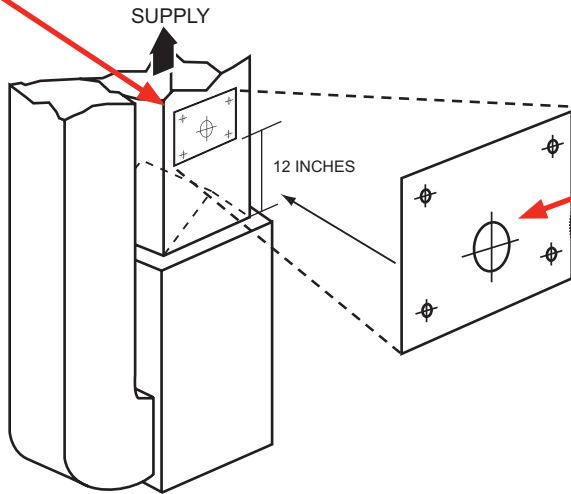
M24894

Insert nozzle and twist clock-  
wise to ensure tight seal of  
nozzle to TrueSTEAM.

## DUCT MOUNT INSTALLATION

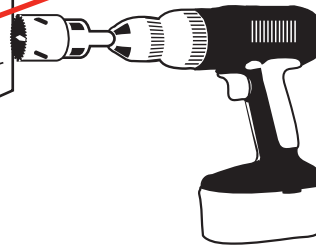
**3**

Position template sticker on supply duct. For tall coils that do not have this clearance available, refer to remote mounting instructions.



**4**

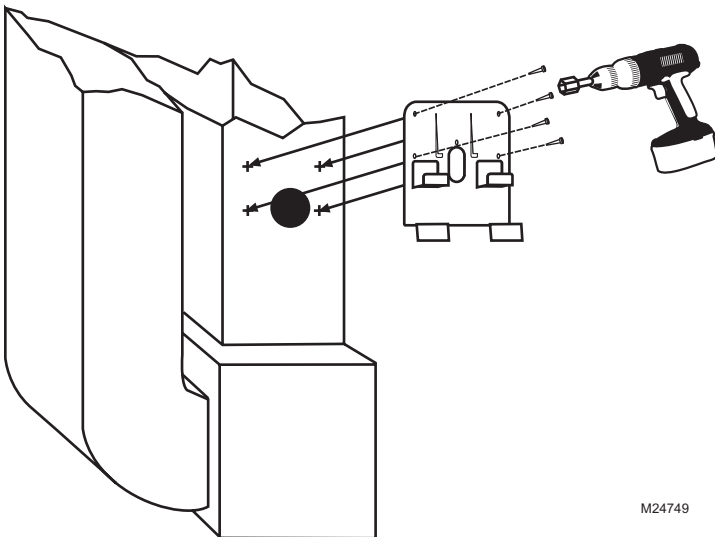
Drill 1-3/4-in. hole.



M24748

**5**

Secure bracket to duct using #8 self-drilling sheet metal screws (4).

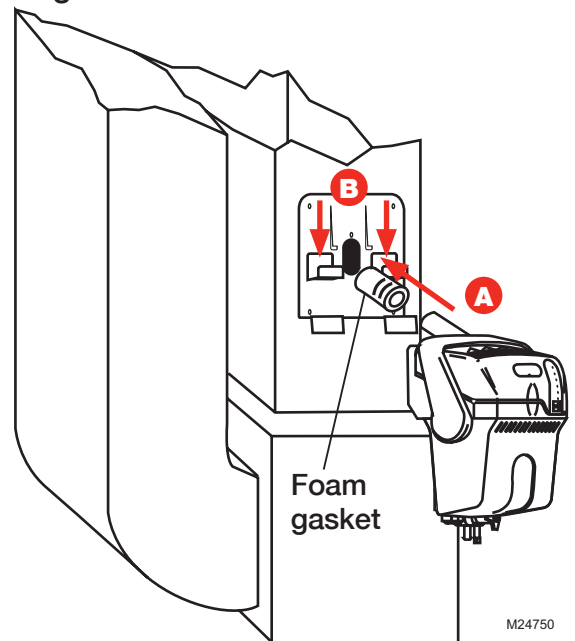


M24749

**6**

A) Slide foam gasket over nozzle and insert the nozzle into duct hole (pictured).

B) Push down to secure humidifier to bracket arms. Ensure gasket forms tight seal in duct hole.



M24750

**Proceed to page 11 for plumbing and wiring instructions.**

## REMOTE MOUNT INSTALLATION

Use for mounting to a location other than the supply duct.

Most operation problems are caused by improper hose installation. Always ensure an uphill flow when installing the remote hose, and avoid kinks, sharp turns, or low spots that could restrict the flow of steam into the injection nozzle or condensation back into the humidifier.

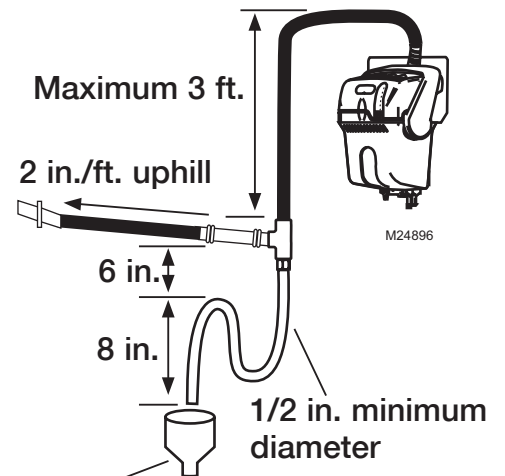
If the remote hose cannot be installed with an upward pitch of 2 in./ft., a drip tee must be installed. Failure to do so can result in back pressure on TrueSTEAM, which can lead to duct nozzle water spitting or leaking gasket. Remote hose must be supported to prevent sagging or low spots.

1

Choose a location for TrueSTEAM and the remote duct nozzle (see remote installs on pages 6–7).

It should have access for:

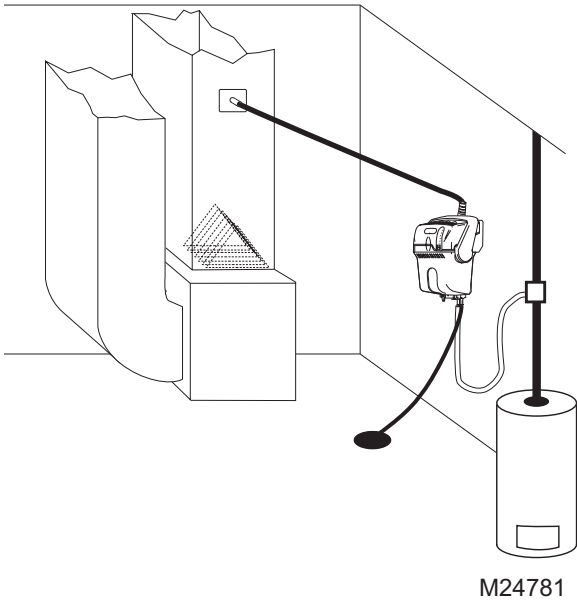
- Remote hose installation. Steam hose must be installed with 2 in./ft. pitch on a continuous uphill slope.
- Drain. Allow a continuous downslope to the drain.
- Cold water line.
- Electrical circuit rated to your humidifier (see circuit ratings on page 8).



Funnel or floor drain. Refer to governing codes for drain pipe size and maximum temperature requirements.

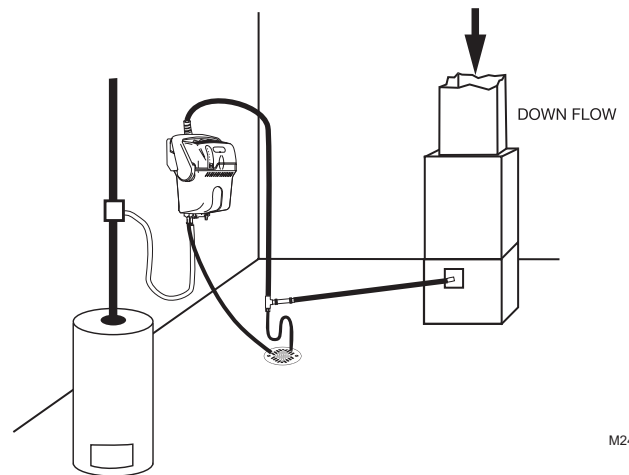
## PROPER HOSE INSTALLS

### Furnace or Mechanical Room Remote

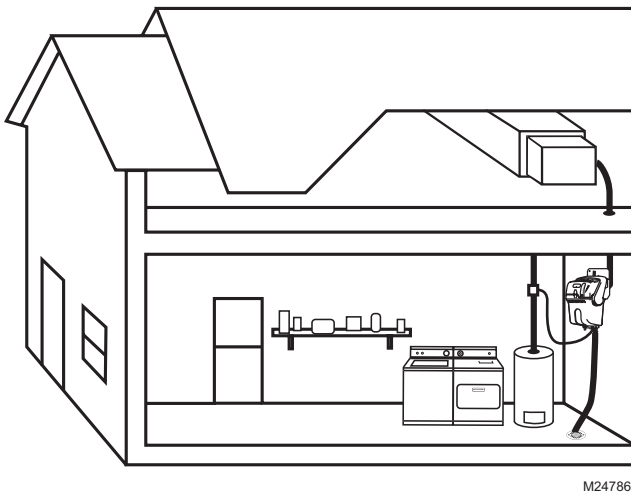


**Note:** If air handler location temperatures will drop below freezing at any time, TrueSTEAM must be mounted in a conditioned space, running a remote hose to the duct.

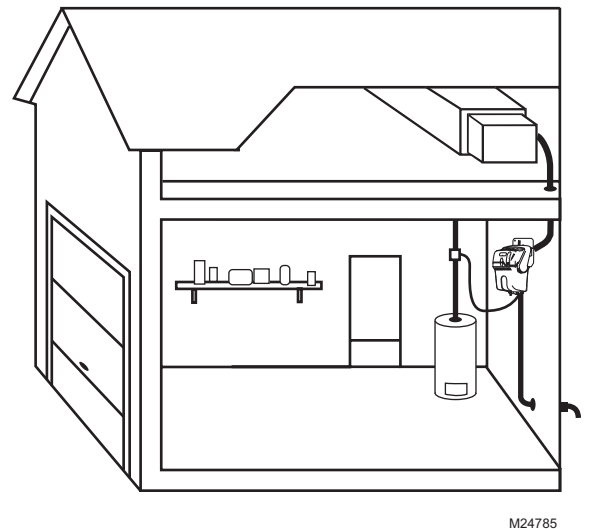
### Duct Mount Remote



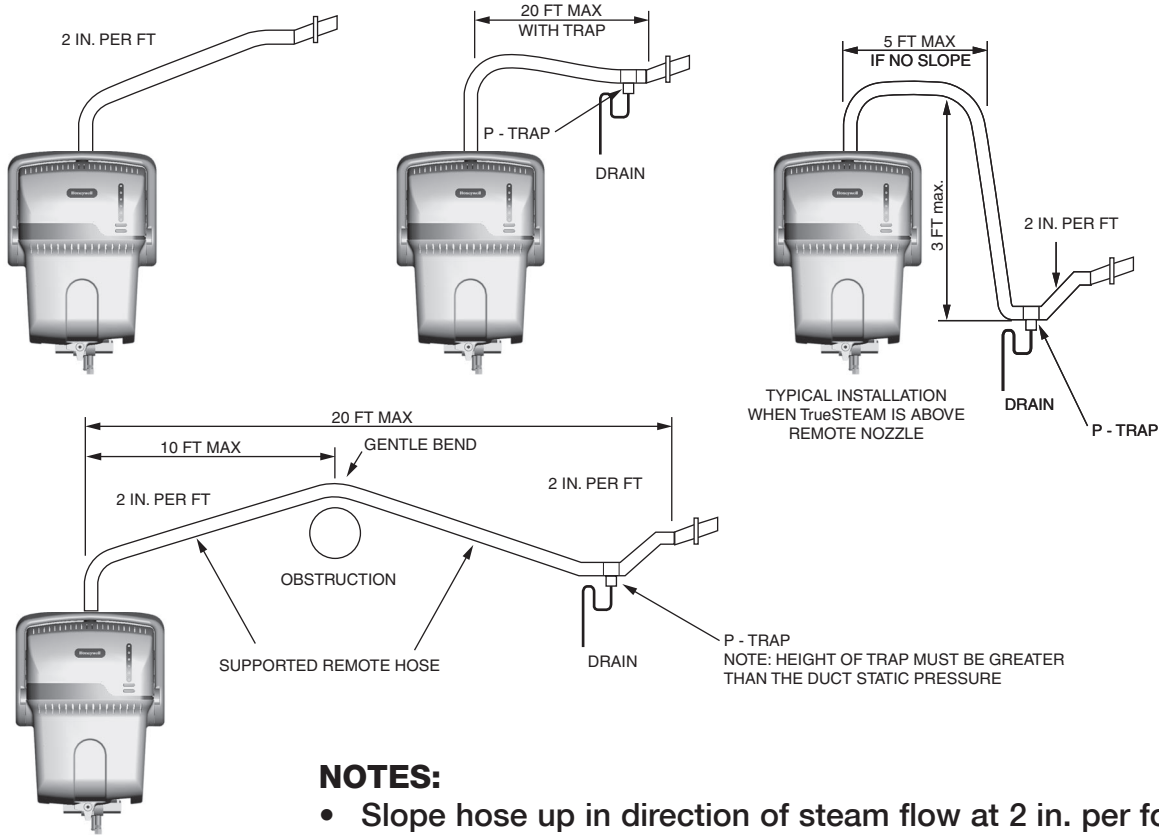
### Living Area Remote Options



### Garage Remote



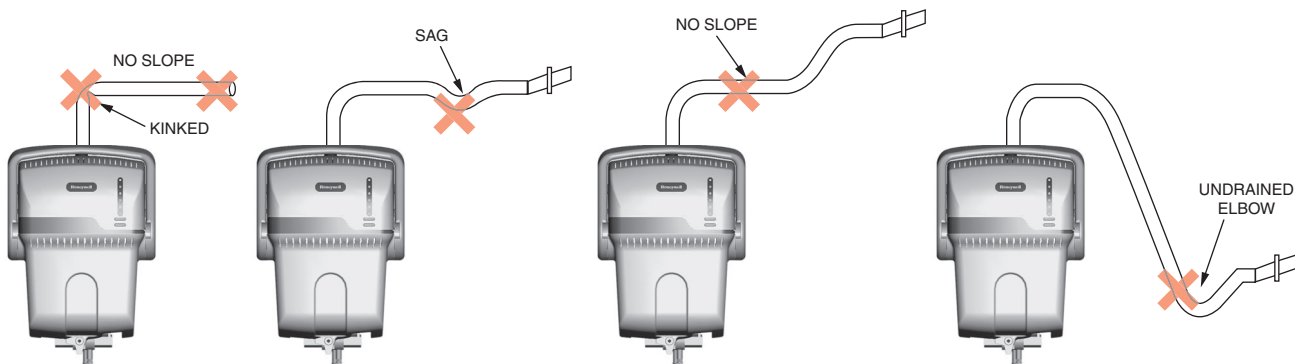
## PROPER HOSE INSTALLS



### NOTES:

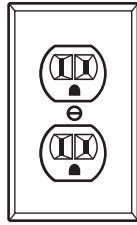
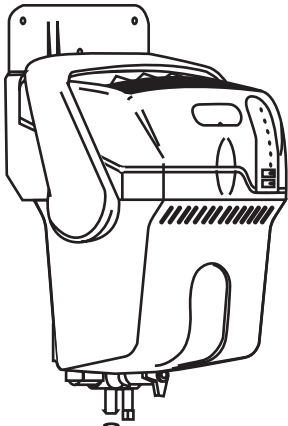
- Slope hose up in direction of steam flow at 2 in. per foot;
- Slope hose down in direction of steam flow at 3/4 in. per foot;
- Maximum length of remote steam hose is 20 ft.
- Height of P-traps must be greater than the duct static pressure. (Typical 3 in. will suffice.)
- Minimize sharp bends and elbows.
- Insulating the remote hose in unconditioned spaces will sustain efficiency better than not insulating the hose.

## AVOID THESE INSTALLATION MISTAKES.



M24915

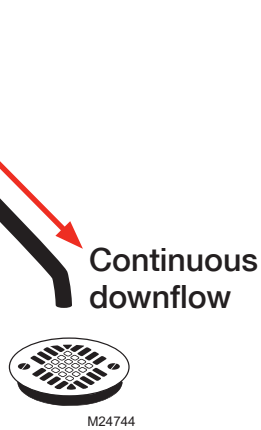
## REMOTE MOUNT INSTALLATION



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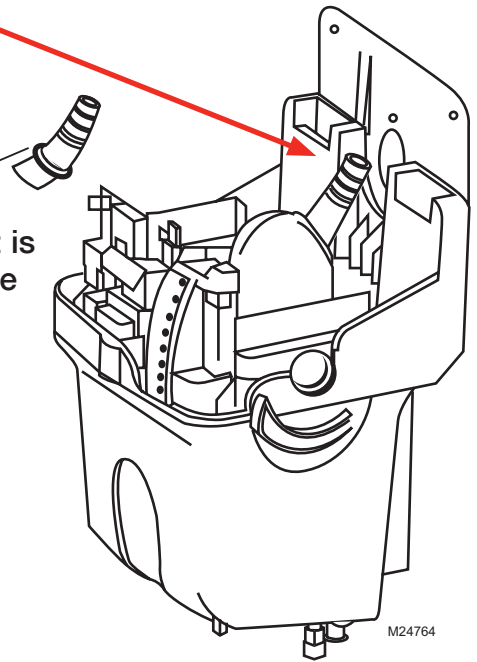
Model	Minimum Circuit Capacity
HM506	7 Amps
HM509	10 Amps
HM512	12 Amps

**2** Install hose adapter from Remote Mount Kit.



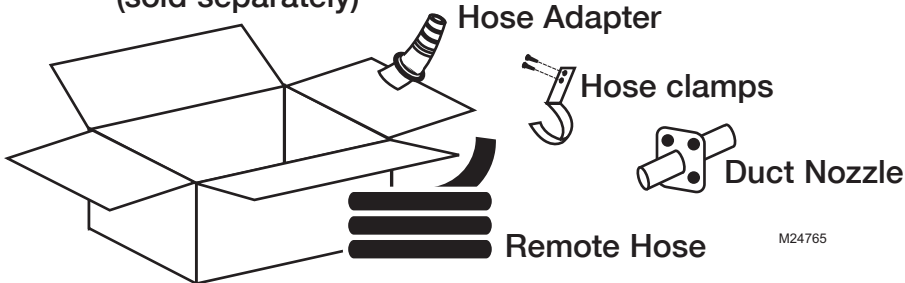
M24744

Ensure o-ring gasket is properly seated in the groove.

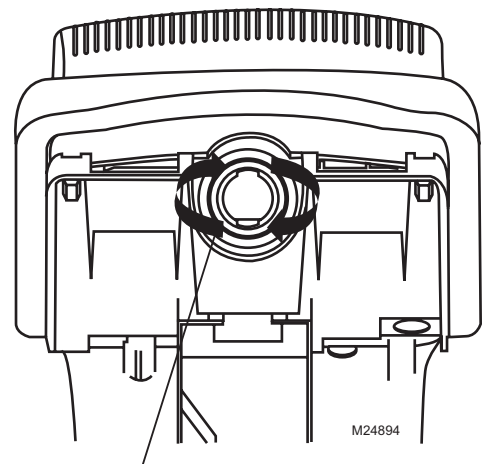


M24764

### Remote Mount Kit (sold separately)



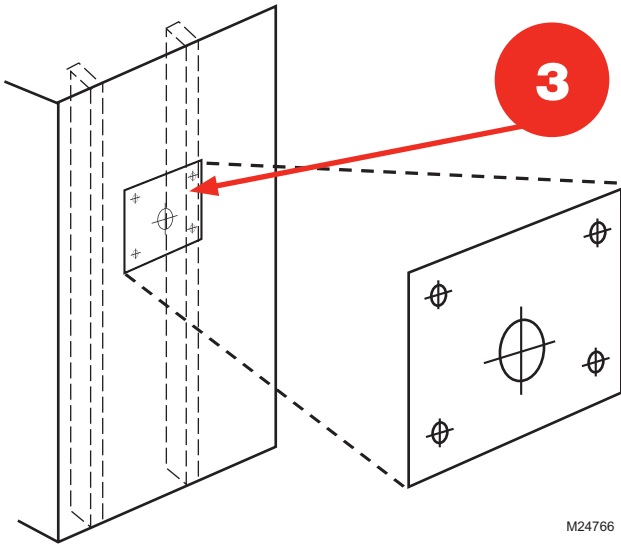
M24765



M24894

Insert hose adapter and twist clockwise to ensure tight seal of nozzle to TrueSTEAM.

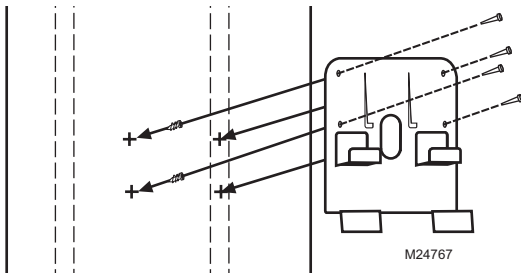
## REMOTE MOUNT INSTALLATION



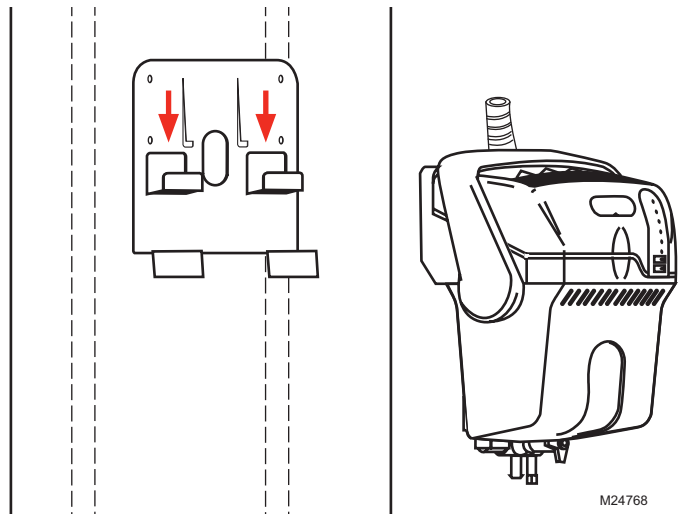
Position template sticker on remote location.

**Note:** TrueSTEAM will weigh 12–15 lbs. (+/- 2 lbs.) with water, so if mounting onto drywall or plaster, position one side over a wall stud.

**4** Insert wall anchors (4) into pilot holes and secure bracket to location.



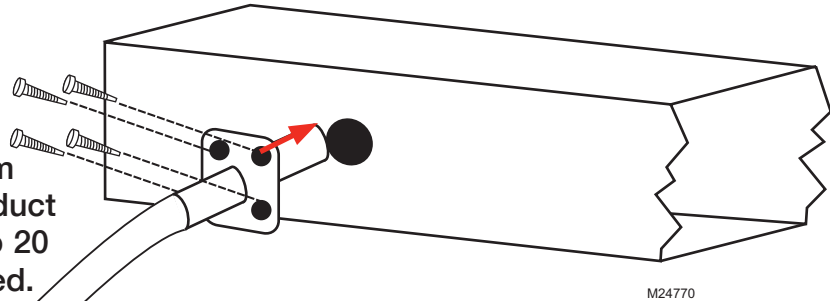
**5** Push down to secure TrueSTEAM to bracket arms.



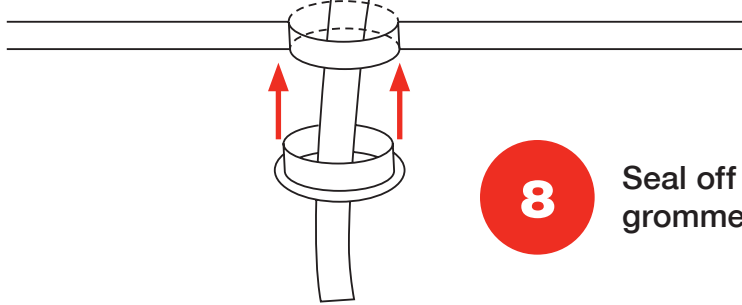
## REMOTE MOUNT INSTALLATION

- 6** Cut a 1-3/4 in. diameter duct hole, install the provided gasket, and slide the remote nozzle up into the duct. Secure remote nozzle to duct using #8 self-drilling sheet metal screws (4).

- 7** Run remote hose from the humidifier to the duct nozzle location. Up to 20 ft. of hose can be used.



If mounting remotely requires running hose through structural barriers (ie. wall or ceiling), cut at least a 1-3/4 in. hole and slide hose through.



- 8** Seal off unconditioned space with a grommet (not provided) or caulk.

- 9** Attach remote hose by sliding over the nozzle and adapter. Secure both hose ends with clamps (provided).



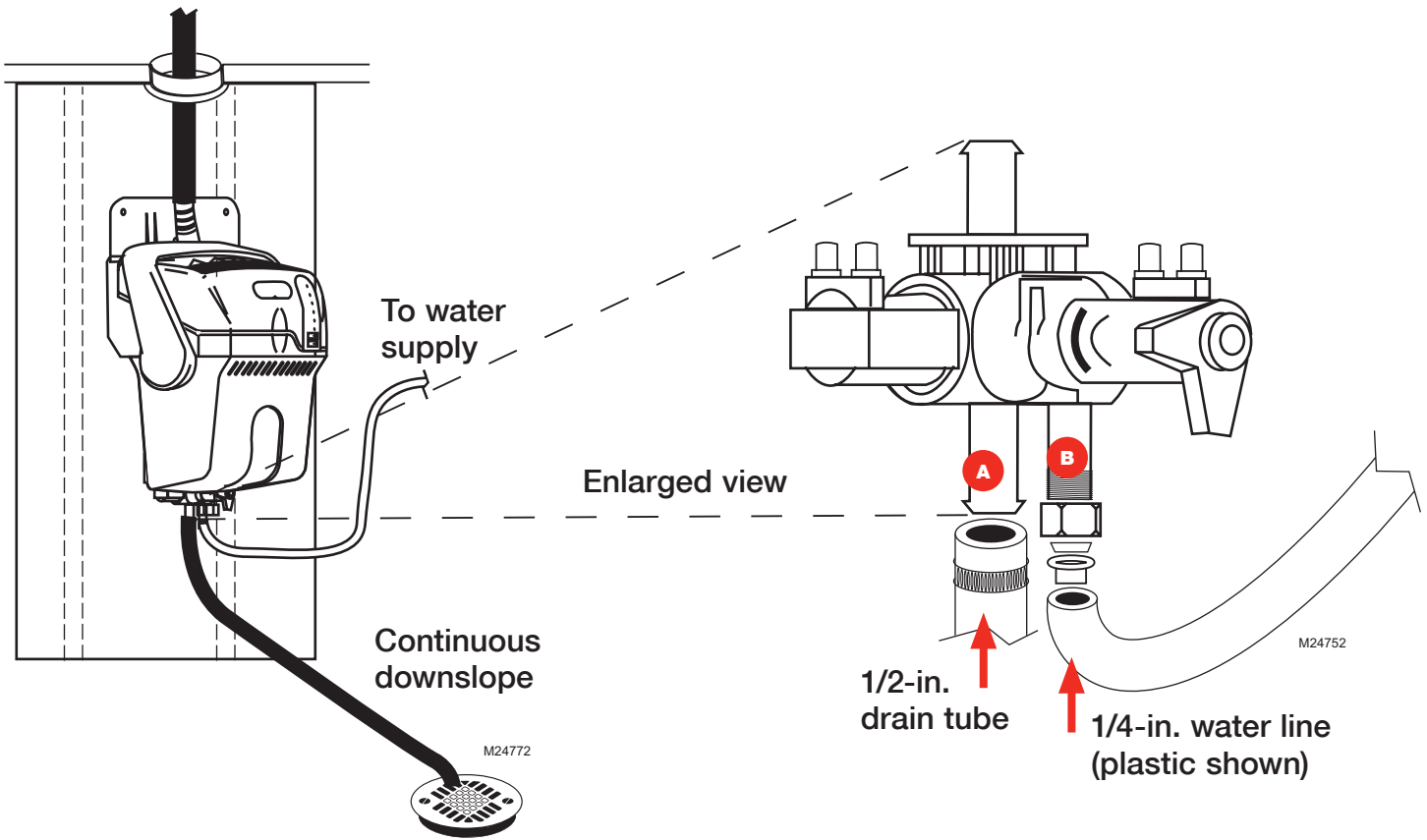
**IMPORTANT:**  
Run hose continuously uphill. For horizontal runs, ensure a slope of 2 in. uphill per foot. Secure hose every horizontal foot using clamps (provided). For long horizontal runs, support the hose by first securing a length of 2 x 4 lumber, U-channel, or angle iron with the appropriate slope. Then attach the hose to the top of this support. If remote hose requires downward pitch, refer to pages 5 and 7 for instruction.



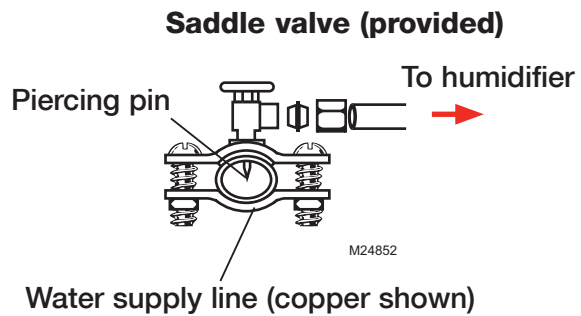
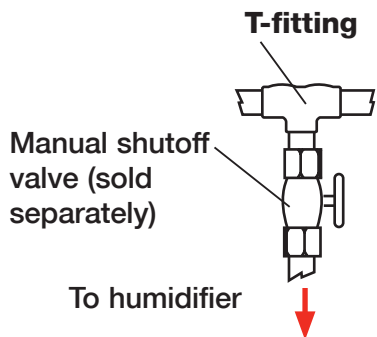
**PLUMBING**

**10**

- A** Connect 1/2-in. drain tube. Secure drain tube to barbed fitting with hose clamp.
- B** Shut off the water supply. Secure 1/4-in. copper or plastic water feed tube.



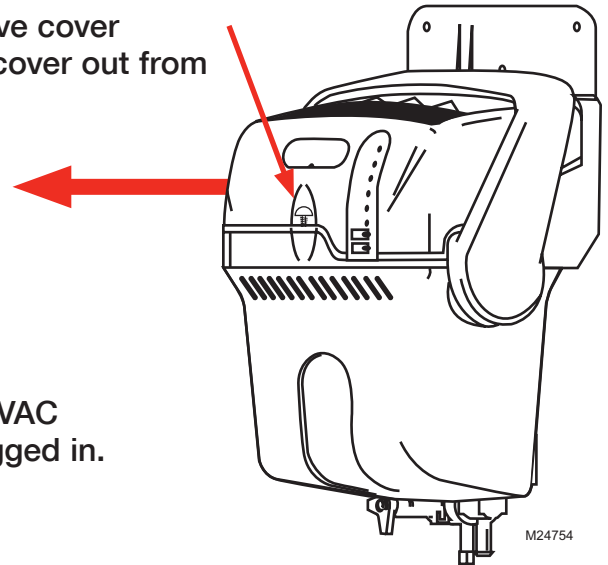
Water line tapping options. See instructions provided with the option you choose.



## WIRING

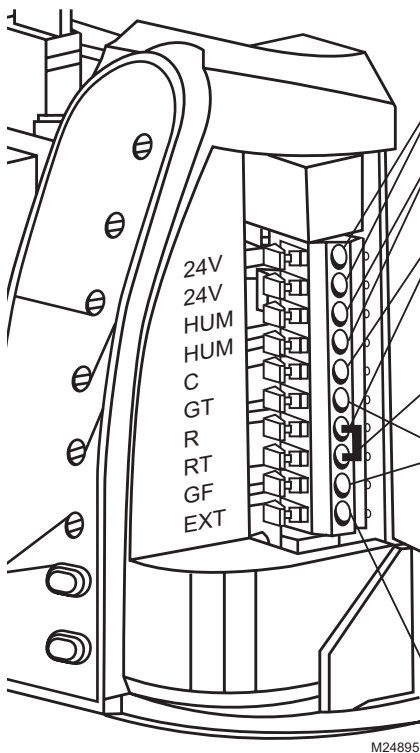
**11**

Loosen captive cover screw. Slide cover out from front.



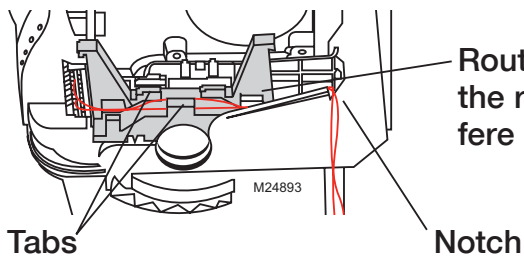
**CAUTION: Voltage Hazard.**

Before wiring to HVAC terminals, disconnect HVAC equipment power. Ensure humidifier is not plugged in.



**Low-Voltage Terminals**

- 24V** AC power for electronic humidistat.
- HUM** Low-voltage humidistat (or thermostat) terminals control humidifier operation.
- C, R** Connects to HVAC system transformer terminals (or relay transformer fan control R and C) to ensure HVAC power is present before humidifying. This can be disabled by changing DIP switch 4 (see page 16).
- RT** Connects to thermostat R terminal, which is normally switched to call for fan.
- GT, GF** GT connects to thermostat G terminal. GF connects to fan board G terminal. Thermostat G passes through the normally-closed (NC) relay contacts to GF, allowing fan activation. When TrueSTEAM is ready to provide humidity to the home, it will take control of the fan by forcing power from RT to GF (if not already activated).
- EXT** When a 24-vac fan board is not used to control blower (hydronic or cooling-only applications), this connection with GF provides dry-contact closure for fan calls. EXT/GF may be wired to a low-voltage relay control center to provide line-voltage fan control.



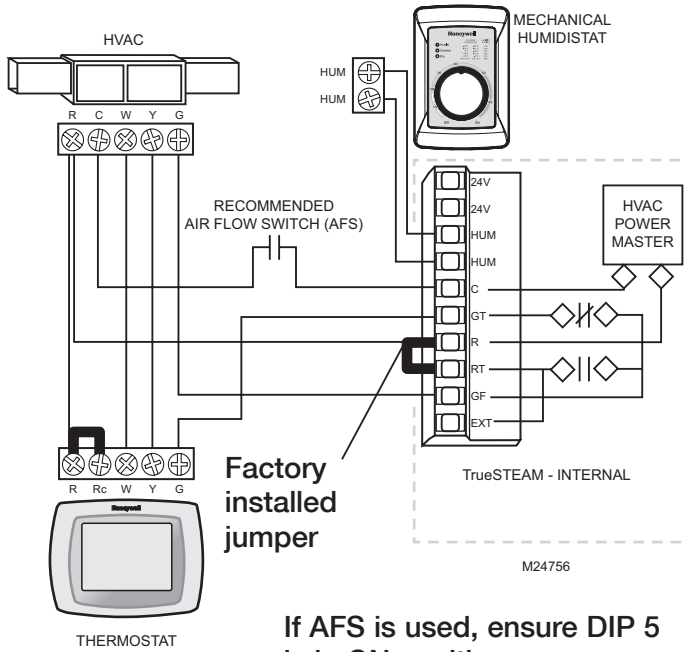
Route wires through the raised harness tabs and out the notch at the rear of the chassis. Ensure wires are secure and do not interfere with assembly of cover.

**WIRING**

**12**

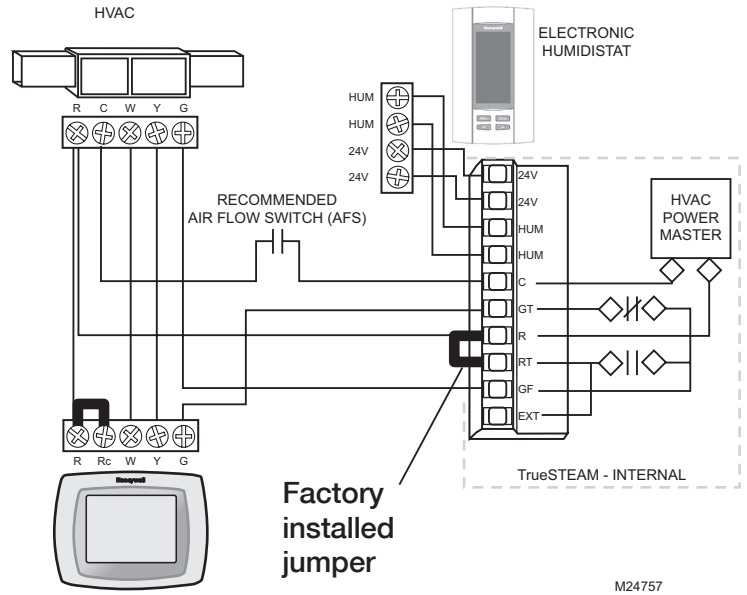
**Wire the TrueSTEAM according to the diagram that applies to your humidity control.**

Follow this diagram if using a mechanical humidistat such as H8908ASPST or other.



If AFS is used, ensure DIP 5 is in ON position.

Follow this diagram if using an electronic humidistat such as DG115EZIAQ or other.

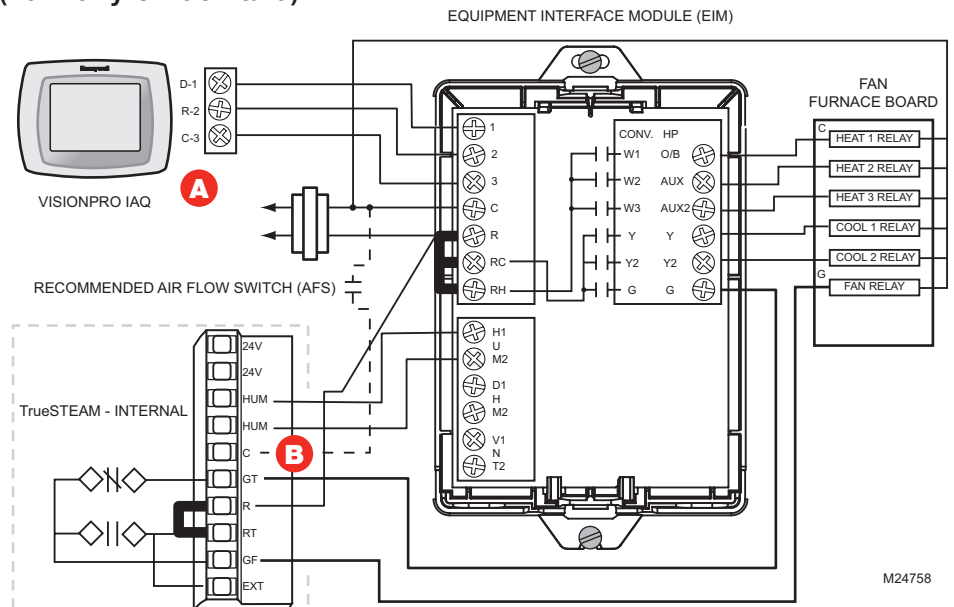


If AFS is used, ensure DIP 5 is in ON position.

Follow this diagram if using VisionPRO IQ™ for independent fan control. TrueSTEAM will independently activate furnace fan (humidity on demand).

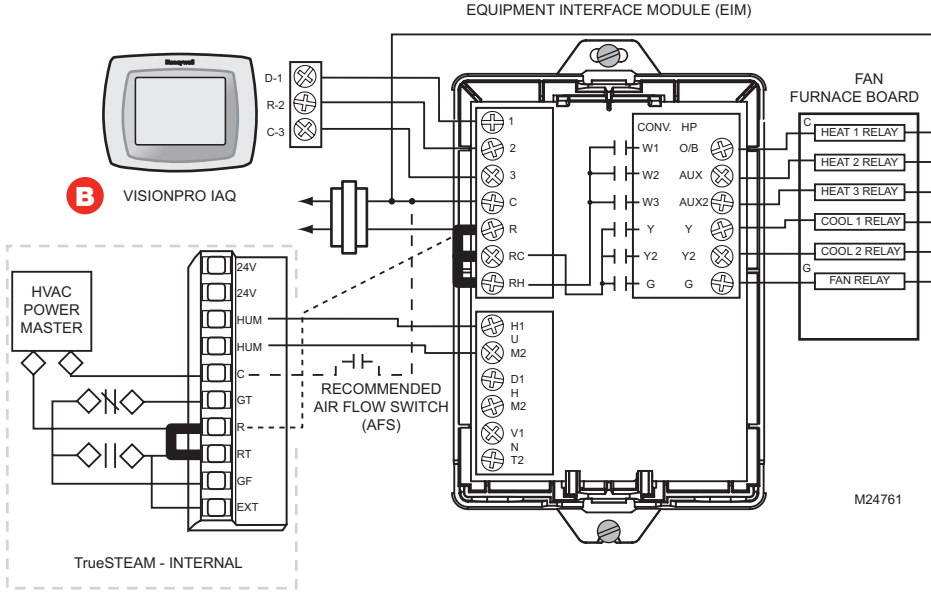
- A** Set VisionPRO IQ™ ISU parameter 374 to 3.
- B** If operating TrueSTEAM without monitoring HVAC power or AFS, C wiring hookup is optional, but ensure DIP 4 is in ON position.

If AFS is used, ensure DIP 5 is in ON position.



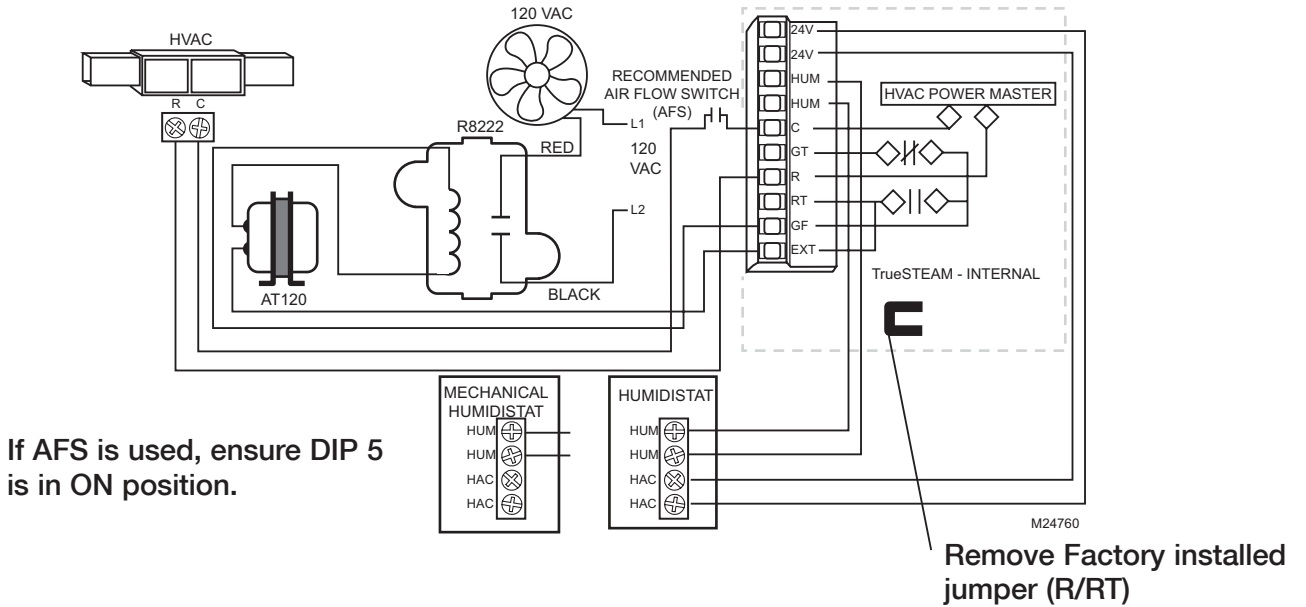
# WIRING

Follow this diagram for a system with the VisionPRO IAQ™ with operation dependent on HVAC power (humidification and fan call by thermostat).



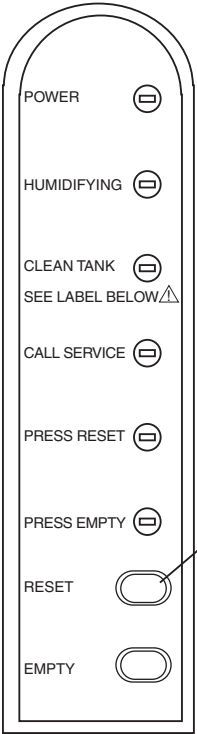
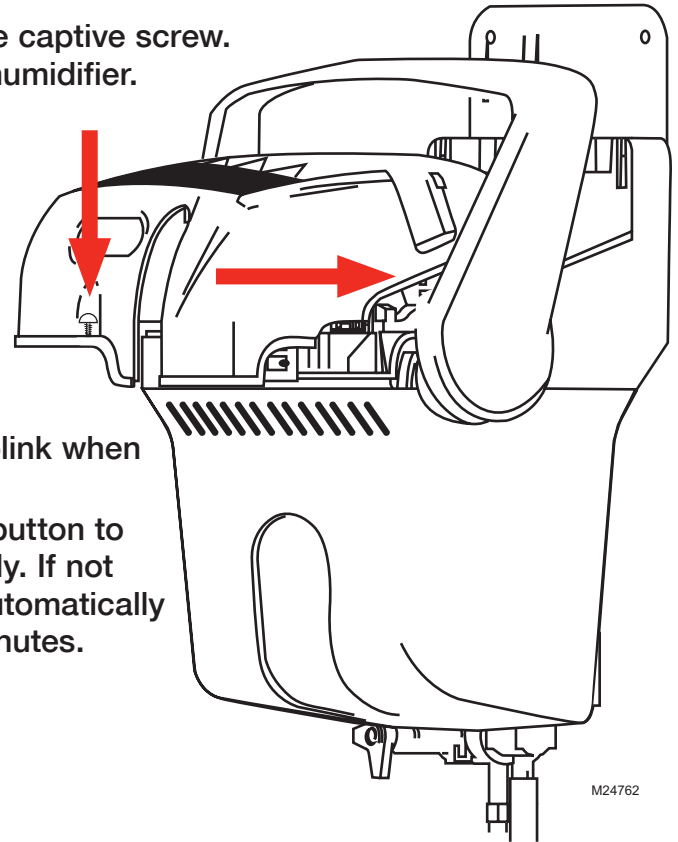
- B** Set VisionPRO IAQ™ ISU parameter 374 to 1. This allows the thermostat to call for fan at the same time as it calls for humidification.
- If AFS is not used, set DIP 4 ON and wire HUM terminals only.
- If AFS is used, set DIP 5 ON and DIP 4 OFF and wire R, C, and Hum terminals.

Follow this diagram if using a blower fan dedicated to the TrueSTEAM (a fan separate from the HVAC equipment, as in hydronic or cooling-only applications).



**WIRING**

- 13** Slide the cover back into place and secure captive screw. Turn on the water supply and plug in the humidifier.



- 14** The Press Reset light will blink when power is applied. Press/release the RESET button to move TrueSTEAM into ready. If not pushed, TrueSTEAM will automatically move to ready after five minutes.

- 15** Turn the humidity control to the "Test" position. If the "Test" position is unavailable, turn the control to a high setpoint (60% +). Be sure to turn this back down (or off) when testing is complete. "Off" will turn TrueSTEAM off.



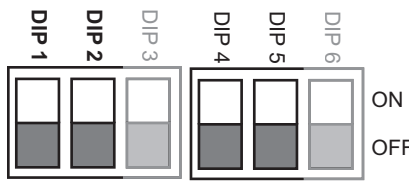
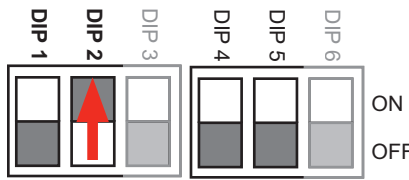
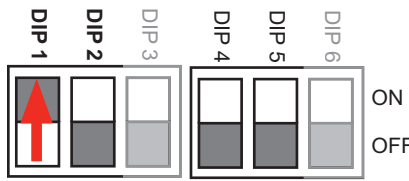
- 16** Confirm that the furnace blower turns on to circulate air. This will take about 10–15 minutes upon call for humidity.

**Important for Remote Installation:**

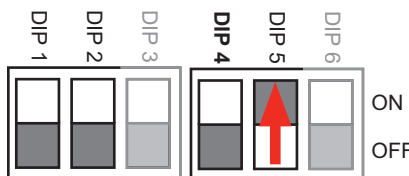
After TrueSTEAM has produced steam for 10–15 minutes, check the integrity of the remote hose to ensure no sags have occurred. Add or adjust clamps if necessary to ensure 2 in. per foot continuous slope.

## DIP SWITCH SELECTION

Between the transformer and LED display on the circuit board are two sets of DIP switches. DIP 1 and 2 can be configured to adjust cleaning cycles. DIP 4 and 5 can simplify wiring. DIP 3 and 6 are not used at this time. Details below.

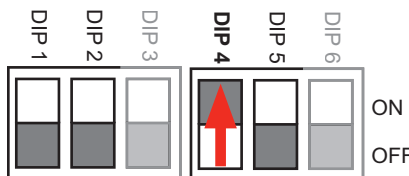
	Run time (hrs)	End-of-Season timer (hrs)	Clean tank indicator
	10 hrs of humidifying before system auto-flushes debris from tank.	48 hrs before system auto-drains and remains empty until next call for humidity.	1 year of total time (operational and inactive) before the Press Empty light will blink, indicating it is time to manually clean the water tank.
	20 hrs of humidifying before system auto-flushes debris from tank.	48 hrs before system auto-drains and remains empty until next call for humidity.	1 year of total time (operational and inactive) before the Press Empty light will blink, indicating it is time to manually clean the water tank.
	30 hrs of humidifying before system auto-flushes debris from tank.	48 hrs before system auto-drains and remains empty until next call for humidity.	1 year of total time (operational and inactive) before the Press Empty light will blink, indicating it is time to manually clean the water tank.

M24853

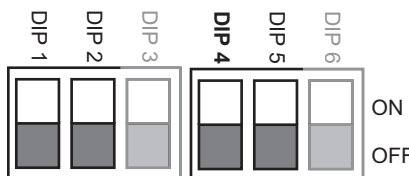


**DIP 4 OFF, DIP 5 ON:** If TrueSTEAM determines that no airflow\* is present two minutes after the blower fan call, it will shut down steam output and activate a service light.

\*Requires installation of air flow switch. See 'Wiring' section for details.



**DIP 4 ON, DIP 5 either setting:** TrueSTEAM will allow humidity without HVAC power present and without airflow.



**DIP 4 OFF, DIP 5 OFF:** TrueSTEAM will not be allowed to humidify without HVAC power being present.

M24854

## TROUBLESHOOTING

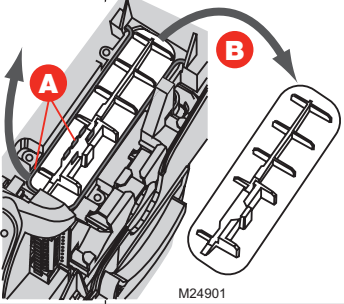
TrueSTEAM has internal system diagnostics that monitor system operation, maintenance schedules, and faults. If a system fault is detected, the system will attempt to recover itself up to five times in a 24 hour period. If unable to recover in that time, the red Call Service LED light will activate.

**HVAC Installing Technicians:** If the TrueSTEAM Call Service light is red, a system fault has occurred from which the humidifier can not recover by itself. The table below shows the possible faults, along with steps to fix TrueSTEAM.

If the red Call Service LED light is on, press/release the RESET button. The red Call Service LED light will begin blinking in a series that indicates what fault occurred. Refer to the table below for the fault signified by the number of blinks that occur.

Press/hold the EMPTY button to clear the Service Timer light (i.e. the Press Empty button).

Press/release the EMPTY button to drain the tank.

No. of Red Light Blinks	Fault Description	Auto-Recoverable?	Steps to Fix To be Performed by Professional HVAC Technician Only
1	Water/Heater temperature sensor failed.	Yes, system will return to "Ready" if fault no longer exists in 1 hour.	<ul style="list-style-type: none"> <li>• Unplug TrueSTEAM and remove cover.</li> <li>• Check water sensor connection to electronic board.</li> <li>• Reattach cover and plug TrueSTEAM in.</li> <li>• If fault reappears, press EMPTY button and follow tank cleaning steps on pages 20–21.</li> <li>• Reassemble tank and press the RESET button.</li> <li>• If fault returns, replace with applicable wattage heating element.</li> </ul>
2	Water sensors failed. 	Yes, system will return to "Ready" if fault no longer exists in 1 hour. Will attempt to reset itself 5 times in 24 hours.	<ul style="list-style-type: none"> <li>• Unplug TrueSTEAM and remove cover.</li> <li>• <b>A</b> Disconnect water level sensor wiring, remove screen and lift snap-hinge clamp.</li> <li>• <b>B</b> Remove water sensor assembly.</li> <li>• Clean water sensor probes using warm soapy water so that the metal is exposed.</li> <li>• Reassemble the sensor assembly in the unit, reattach and secure cover.</li> <li>• Plug unit back in and press the RESET button.</li> <li>• If fault reappears, replace sensor assembly.</li> </ul>
3	Failure to fill tank with water.	Yes, system will return to "Ready" if fault no longer exists in 1 hour.	<ul style="list-style-type: none"> <li>• Ensure inlet water is on.</li> <li>• Check for leaks around the tank seal and solenoid.</li> <li>• Turn off water supply and replace in-line water filter.</li> <li>• Press/hold RESET button until the red Call Service light turns off.</li> <li>• If tank still fails to fill, press the EMPTY button (if unit fails to drain, unplug unit and make sure water in tank is cool).</li> <li>• Follow tank cleaning instructions on page 20. Ensure you have a firm grip of the tank prior to releasing the tank, especially if water is present.</li> <li>• Clear any excess debris from the tank's bottom orifice to the solenoid.</li> <li>• Reassemble tank and plug unit back in. Press the RESET button.</li> <li>• If water still fails to flush into the tank, replace the solenoid valve.</li> </ul>

## TROUBLESHOOTING

No. of Red Light Blinks	Fault Description	Auto-Recoverable?	Steps to Fix To be Performed by Professional HVAC Technician Only
4	Heating element overheated.	No	<ul style="list-style-type: none"> <li>• Press EMPTY button.</li> <li>• Follow tank cleaning steps (pages 20–21).</li> <li>• Reassemble tank and press the RESET button.</li> <li>• If fault returns, replace with applicable unit.</li> </ul>
5	Input voltage insufficient.	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	<ul style="list-style-type: none"> <li>• Unplug and replug the unit in to see if the fault returns.</li> <li>• If fault returns, unplug unit and remove cover.</li> <li>• Ensure wiring connections are secure and attached.</li> <li>• If fault returns, replace the TrueSTEAM with a new one (field service is not recommended in the event line voltage is lost).</li> </ul>
6	Water overflow sensed.	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	<ul style="list-style-type: none"> <li>• Ensure drain hose is not kinked or submerged in water at the drain. Check functionality of condensate pump if used.</li> <li>• Check for water coming out of drain/overflow line. If continuous water flow is present, follow the cleaning steps on pages 20–21.</li> <li>• Press EMPTY button to drain tank.</li> <li>• Set humidistat RH setpoint to Test mode.</li> <li>• If fault returns, unplug TrueSTEAM.</li> <li>• Loosen cover screw and remove cover.</li> <li>• Disconnect water level sensor wiring and lift snap-hinge clamp to remove water sensor assembly. See image on page 17.</li> <li>• Clean probes using warm soapy water so that the metal is exposed.</li> <li>• Reassemble the sensor assembly in the unit, reattach and secure cover.</li> <li>• Plug unit in, and press RESET button.</li> <li>• If fault reappears, replace water sensor assembly and/or solenoid valve.</li> </ul>
7	HVAC power not present (monitor this fault only when DIP 4 and 5 are OFF).	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	<ul style="list-style-type: none"> <li>• Unplug and replug the unit in to see if power returns.</li> <li>• If not, ensure HVAC equipment has power. Check circuit breaker and replace fuse if circuit is tripped.</li> <li>• Unplug TrueSTEAM and remove cover.</li> <li>• Ensure DIP 4 is ON and reattach cover.</li> <li>• Plug unit in.</li> <li>• If fault reappears, ensure the circuit being used has the rating to support the unit. Unplug any additional equipment plugged into this circuit. If fault disappears, the circuit capacity is not properly sized to your unit.</li> <li>• If fault returns, replace unit.</li> </ul>
8–11	The backup weld monitor input is active when the backup heater relay is off.	No	<ul style="list-style-type: none"> <li>• Replace the unit.</li> </ul>
12	Temperature of the electronic circuit board is too high.	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	<ul style="list-style-type: none"> <li>• Ensure ventilation holes in the cover are clear of obstruction, and that 1 foot of clearance is maintained around the cover’s vent holes.</li> <li>• Ensure the TrueSTEAM is installed in a location with conditioned air 32°F (0°C) to 104°F (40°C).</li> <li>• Turn humidistat off and allow time for electronic board to cool.</li> <li>• Turn humidistat on and press RESET button.</li> <li>• Confirm humidity call starts by HUMIDIFYING light turning on.</li> <li>• Allow unit to run and check for steam leaks around tank and ventilation holes.</li> <li>• If steam is present, replace TrueSTEAM.</li> </ul>

## TROUBLESHOOTING

No. of Red Light Blinks	Fault Description	Auto-Recoverable?	Steps to Fix To be Performed by Professional HVAC Technician Only
13	Tank failed to drain.	No	<ul style="list-style-type: none"> <li>Press the EMPTY button.</li> <li>If unit fails to drain, wait for water in tank to cool. Ensure tank water is cool before proceeding.</li> <li>Once cool, follow tank cleaning steps (pages 20–21).</li> <li>Reassemble tank and press the RESET button.</li> <li>If fault persists, replace the solenoid valve.</li> </ul>
14	Heater failed to boil water.	Yes, system will return to “Ready” if fault no longer exists in 1 hour.	<ul style="list-style-type: none"> <li>Press EMPTY button, and follow tank cleaning steps (pages 20–21).</li> <li>Reassemble tank and press the RESET button.</li> <li>If fault returns, replace the heating element with the applicable wattage replacement part.</li> </ul>
15	No Airflow	Yes	<ul style="list-style-type: none"> <li>Ensure Airflow Switch is wired correctly. See the Wiring section for proper wiring.</li> <li>Ensure DIP switches are set correctly.</li> <li>If fault persists, replace AFS and/or unit.</li> </ul>

### Capacity:

**HM512:** 12 gallons per day (gpd) (45 liters per day [lpd])

**HM509:** 9 gpd (34 lpd)

**HM506:** 6 gpd (23 lpd)

### Humidified Area:

House Description	Air Changes Per Hour	HM512	HM509	HM506
Loose	Two	2000 ft <sup>2</sup>	1300 ft <sup>2</sup>	1000 ft <sup>2</sup>
Average	One	2500 ft <sup>2</sup>	1800 ft <sup>2</sup>	1500 ft <sup>2</sup>
Tight	One-half	3000+ ft <sup>2</sup>	2500 ft <sup>2</sup>	2000 ft <sup>2</sup>

### Weight:

Model	Empty	Filled with Water
HM512	9 lbs.	15 lbs.
HM509	9 lbs.	14.5 lbs.
HM506	8 lbs.	12 lbs.

Dimensions: 11-1/4 in. W x 19 in. H x 9 in. D

Humidifier Operating Temperature Range: 34°F–104°F (1.1°C–40°C)

Remote Hose/Nozzle Operating Temperature Range: -50°F–250°F (-46°C–121°C)

Operating Humidity Range: 0–95% RH, non-condensing

Drain Hose Operating Temperature Range: 34°F–212°F (1.1°C–100°C)

### Standards & Approval Body Requirements

Underwriters Laboratories: UL998, File no. E185662.

Federal Communications Commission: Class B compliance, File no. YU555.

Tested to ARI standard 610 and ASHRAE 62.2 for performance rating of central system humidifier for residential applications. Intended to be used in accordance with the National Electrical Code (NEC), ANSI/NFPA 70, and the rules of the Canadian Electrical Code (CEC), Part 1, C22.1.

### Electrical Ratings and Tolerances

#### Input Ratings

- Power Supply: 120VAC +10/ -15%, 60Hz
  - HM512: 1440W at 120VAC at full load
  - HM509: 1200W at 120VAC at full load
  - HM506: 840W at 120VAC at full load
- HM512: 12A, 120VAC
- HM509: 10A, 120VAC
- HM506: 7A, 120VAC
- 15A, 120VAC interlock switch
- Thermostat/HVAC power monitor (R to C): 10mA resistive at 24VAC
- Field wiring terminals: 18–22 ga. solid
- HVAC power/airflow monitor: 10 mA resistive at 24 VAC

#### Output Ratings

- Relay output contacts:
  - Fan: 1.5A full load, 7.5A locked rotor at 24VAC
  - Heat and Backup: 15A resistive at 120VAC
- Fill Solenoid: 0.1A at 120VAC, 0.5 PF
- Drain Solenoid: 0.1A at 120VAC, 0.5PF
- Humidistat output contacts: 10mA resistive at 24VAC
- Humidistat power supply: 100mA at 24VAC

## CLEANING AND SEASONAL OR VACATION MAINTENANCE

Maintenance is simple with TrueSTEAM—just remove the water tank for cleaning.

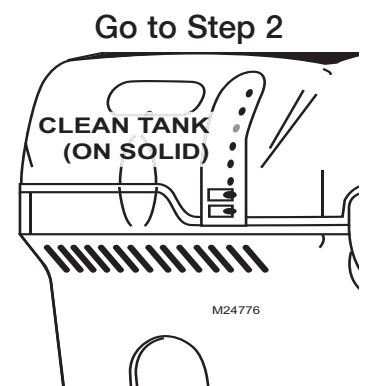
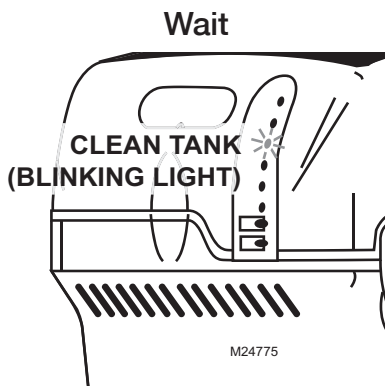
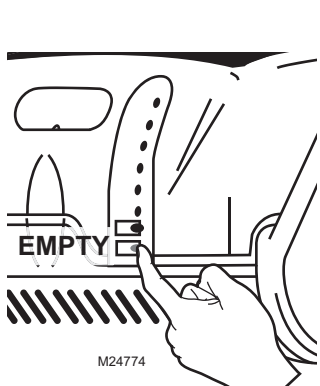


**Warning: Scalding hazard.**

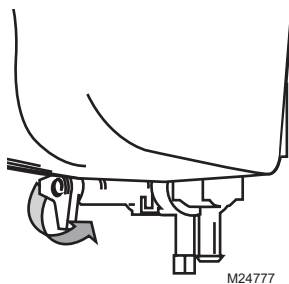
Do not attempt to remove the humidifier from the mounting bracket during operation, or when the humidifier's water tank when full of water. Water heater could be hot when tank is removed. Failure to comply could result in severe scalding or death.

To clean the TrueSTEAM:

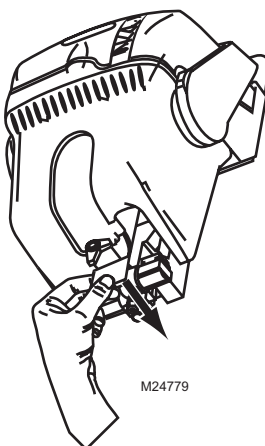
1. Press the EMPTY button. Wait for the CLEAN TANK light to be on solid (not blinking).



2. Turn the manual shut-off valve at the bottom of the tank to the "Unlock" position.

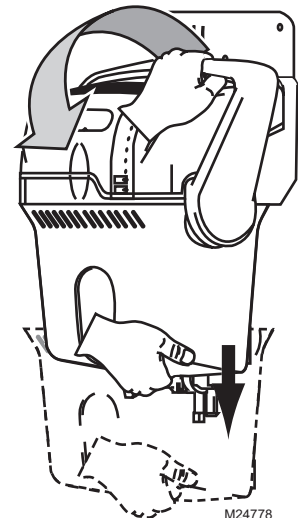


3. Grip the white water valve arm and slide it back within the bracket to disengage from the tank.



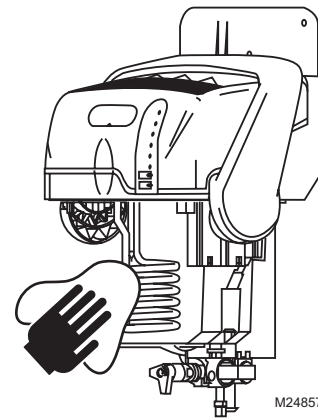
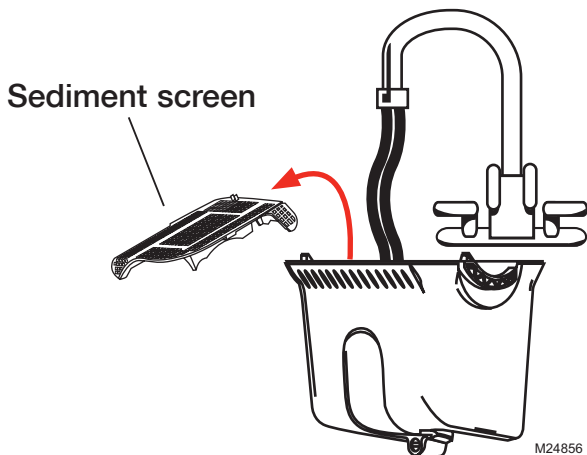
4. Firmly grip the tank bottom. Push down the cover's safety button and pull the latch forward to release the tank.

**Note:** Latch does not come off humidifier with tank.



## CLEANING AND SEASONAL OR VACATION MAINTENANCE

5. Use tap water to flush loose minerals from the tank. Sediment screen at tank's bottom is removable. For a more thorough cleaning, soak tank in warm, soapy water, then rinse clean. Tank is also dishwasher-safe.
6. Carefully rub minerals off of the heating element, reservoir walls, and sensors. Scouring pads suitable for non-stick pots or pans are suitable for cleaning the TrueSTEAM reservoir walls and components within the tank.



Once clean, reattach tank by securing the latch. Engage the water valve to the cam shaft, and “Lock” the shut-off valve. The “Press Reset” light will blink at start-up. Push the RESET button to ready the humidifier.

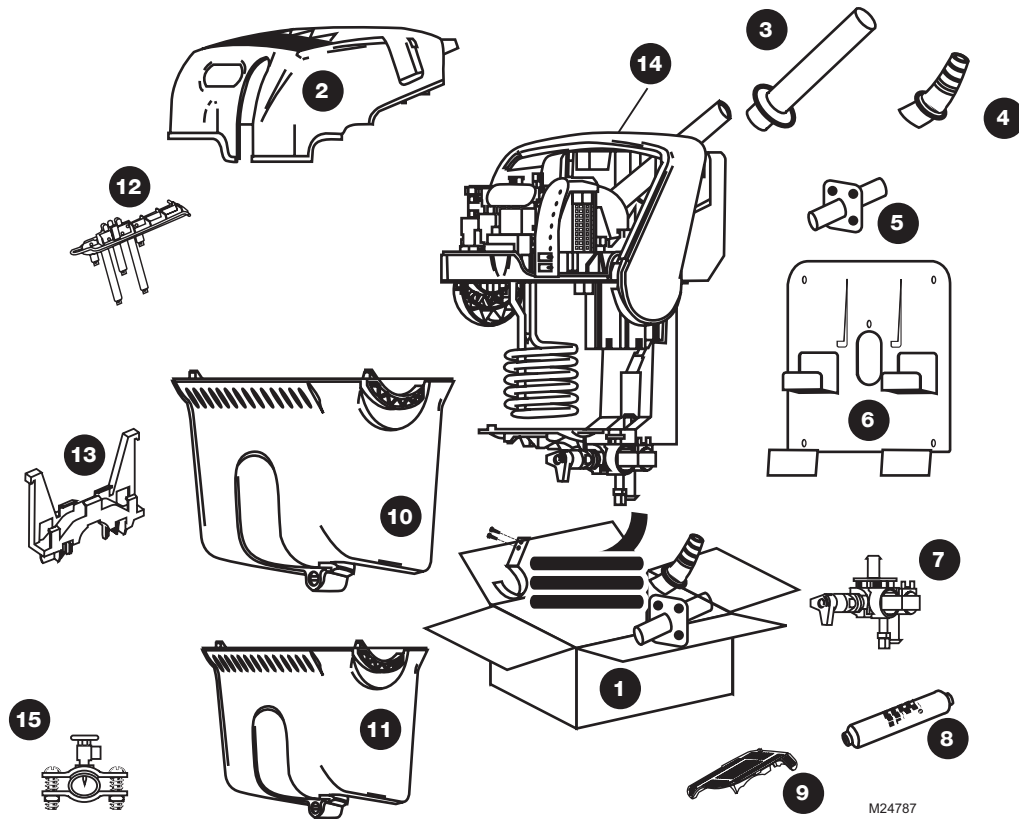
Your TrueSTEAM humidifier has the built-in intelligence to shut down when humidity is not needed for an extended period. After 48 hours of inactivity, TrueSTEAM will drain and remain empty until humidity is needed again. This prevents water from stagnating within the tank. There are a few house-cleaning steps to follow to keep your TrueSTEAM at peak efficiency:

1. Follow steps 1–6 in the Cleaning section on page 20 at least once per year, or when the “Press Empty” light is blinking.
2. Clear ventilation holes in the humidifier’s cover.
3. Clear the water drain tube.
4. Make sure the water tank gasket seal is not cracked or split before reattaching the humidifier water tank.
5. Check that the humidifier is still mounted level.

### Extended Vacation

When you leave on extended vacations, it is recommended you turn off the humidifier’s water supply and turn off the humidity control. When you return, turn on the humidifier water supply and reset your humidity control to a comfortable position.

Part	Part Number	Fig. Reference
10-foot Remote Hose and Nozzle Kit	50024917-001	1
20-foot Remote Hose and Nozzle Kit	50024917-002	1
Cover	50028004-001	2
Duct Injection Nozzle for Humidifier	50028003-001	3
Remote Hose Adapter	50028001-001	4
Remote Duct Nozzle	50028002-001	5
Mounting Bracket	50020012-001	6
Solenoid Valve	50027997-001	7
In-Line Water Filter	50028044-001	8
Sediment Screen for Tank	50024895-001	9
HM512/HM509 Water Tank	50020017-001	10
HM506 Water Tank	50025892-001	11
Water Level Sensor Assembly	50027998-001	12
Wire Channel Harness	50022641-001	13
Latch	50024921-001	14
Saddle Valve	32001616-001	15



### Automation and Control Solutions

Honeywell International Inc.  
 1985 Douglas Drive North  
 Golden Valley, MN 55422  
<http://yourhome.honeywell.com>

Honeywell Limited-Honeywell Limitée  
 35 Dynamic Drive  
 Toronto, Ontario M1V 4Z9

# Honeywell