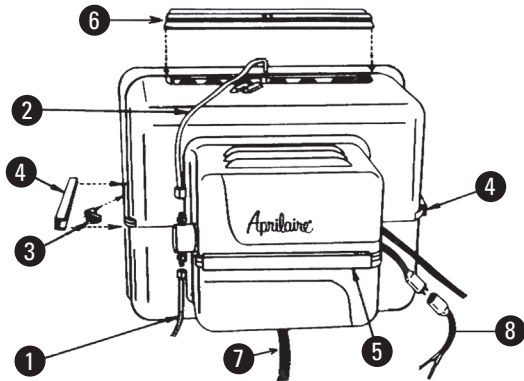


## ⚠ WARNING

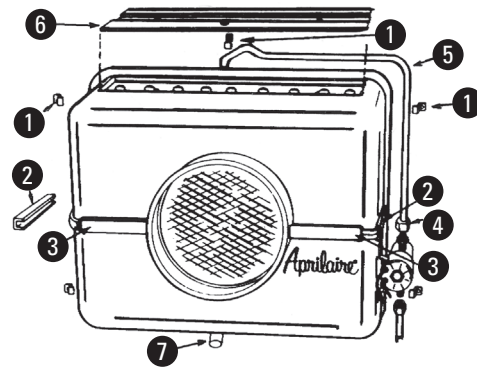
**120 Volts may cause serious injury from electrical shock. Disconnect power and shut off water supply before servicing.**

**Aprilaire Model 112**  
(Serial number 84647 and higher)



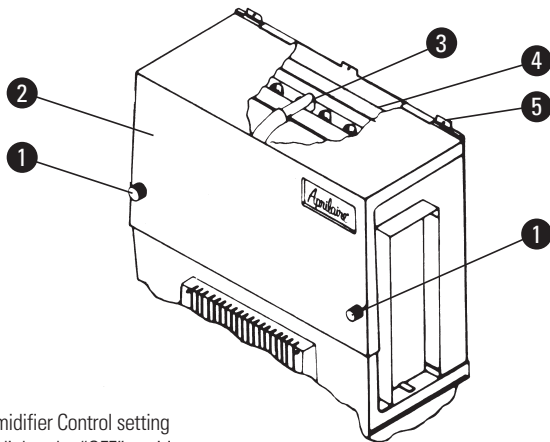
1. Note humidistat setting and turn dial to the "OFF" position.
2. Disconnect electrical power and turn off water supply.
3. Disconnect: a) 120 volt electrical service.  
b) Copper water supply line (1) and feed tube (2).  
c) Drain line (7). d) 24 volt leads (8).
4. Turn two swing locks (3), one at either side of lower housing of humidifier flange.
5. Lift humidifier straight up until bottom of humidifier clears lip of lower housing. Pull humidifier out at bottom, lower and remove.
6. Slide off three closure clips (4 & 5) that hold 2 halves of humidifier together.
7. Remove upper half of humidifier. Remove water distribution pan cover (6) and remove any mineral deposits from the "V" notches. **DO NOT** scrape off granular coating from the bottom. This textured surface helps ensure even water flow for maximum performance. If the granular coating has been removed, place several drops of liquid dishwashing soap on the distribution tray. This will only need to be done once if there is no granular coating.
8. Remove Water Panel evaporator and scale control insert (if used).
9. Remove Water Panel evaporator from scale control insert (if used). Clean scale control insert of mineral deposits. If scale control insert is not used, contact your dealer about obtaining one.
10. Install a new Water Panel evaporator, with **colored spot UP**, in scale control insert (if used), or directly into the humidifier if insert is not used. **IMPORTANT:** When installing scale control insert and Water Panel evaporator into the humidifier, the insert spout **must** discharge directly into the drain.
11. Remove drain line (7) from the bottom of the humidifier. If applicable, flex it to loosen any mineral deposits or blockages. Then flush it with water under pressure. If it does not properly clear, replace it. Slip drain line back onto the drain fitting. Make sure the drain line has a constant downward slope and is not flattened or blocked.
12. Following Water Panel evaporator replacement and maintenance, reassemble humidifier.
13. Reconnect electrical power.
14. Turn on water supply.
15. Check system operation: With the furnace blower operating and the furnace calling for heat, turn up humidistat and check system operation.
16. Set humidistat to its original position.

**Aprilaire / Chippewa Model 224**



1. Note humidistat setting and turn dial to the "OFF" position.
2. Turn off water supply.
3. Remove the three "Z" clips (1) that hold the top half of humidifier to furnace plenum.
4. Slide off four closure clips (2 & 3) that hold the two humidifier halves together.
5. Loosen compression fitting (4) on copper feed tube (5) and remove.
6. Remove top screw holding sheet metal ductwork to humidifier.
7. Remove top half of humidifier (lift straight up). Remove water distribution pan cover (6) and remove any mineral deposits from the "V" notches. **DO NOT** scrape off granular coating from the bottom. This textured surface helps ensure even water flow for maximum performance. If the granular coating has been removed, place several drops of liquid dishwashing soap on the distribution tray. This will only need to be done once if there is no granular coating.
8. Remove Water Panel evaporator and scale control insert (if used).
9. Remove Water Panel evaporator from scale control insert (if used). Clean scale control insert of mineral deposits. If scale control insert is not used, contact your dealer about obtaining one.
10. Install a new Water Panel evaporator, with **colored spot UP**, in scale control insert (if used), or directly into the humidifier if insert is not used. **IMPORTANT:** When installing scale control insert and Water Panel evaporator into the humidifier, the insert spout **must** discharge directly into the drain.
11. Remove drain line (7) from the bottom of the humidifier. If applicable, flex it to loosen internal mineral deposits or blockages. Then flush it with water under pressure. If it does not properly clear, replace it. Slip drain line back onto the drain fitting. Make sure the drain line has a constant downward slope and is not flattened or blocked.
12. Following Water Panel evaporator replacement and maintenance, reassemble humidifier.
13. Turn on water supply.
14. Check system operation: With the furnace blower operating and the furnace calling for heat, turn up humidistat and check system operation.
15. Set humidistat to its original position.

## Aprilaire Models 440, 445 & 445A



1. Note Humidifier Control setting and turn dial to the "OFF" position.
2. Disconnect electrical power and turn off water supply.
3. Remove two aluminum knobs (1). Swing top cover up and remove from humidifier.
4. Place finger under white feed nozzle (3) at top of water distribution tray (4). Lift up to pop feed nozzle loose from hole and notch in distribution tray.
5. Pull out the water panel evaporator assembly by grasping at the top and tipping out.
6. Unsnap the distribution tray (4) from the scale control insert. Follow the instructions below depending upon the type of distribution tray in your humidifier:

**For trays with a synthetic fabric liner:** Lightly scrape out or brush off any mineral deposits, being careful not to stretch or loosen the synthetic fabric liner. Soaking the tray in vinegar or a lime-removing agent is helpful when trying to remove stubborn mineral deposits.

**For trays with granular coating: Do not scrape off the granular coating,** but lightly scrape out any mineral deposits and clean the "V" notches (5). This textured surface helps ensure even water flow for maximum performance. If the granular coating has been removed, place several drops of liquid dishwashing soap on the distribution tray. This will only need to be done once if there is no granular coating.

7. Slide the Water Panel evaporator out from the scale control insert. Clean the scale control insert of mineral deposits. Slide the new Water Panel evaporator into the scale control insert with the colored spot up and snap the distribution tray (4) back into place.
8. Inspect feed tube by gently flexing it and looking for cracks or signs of wear. Replace tube if it is cracked, brittle, or has been damaged.
9. Reinstall the Water Panel evaporator assembly into the humidifier (with the hole in the distribution tray toward you) by fitting its drain directly over the round receptacle at the base of the humidifier. Push the assembly in at the top to a vertical position. Pop feed nozzle (3) on the end of the feed tube into hole and notch in distribution tray (4).
10. Replace top cover (2) hooking back of cover under lip of metal frame (5) and tighten two knobs (1).
11. Remove the drain line (if applicable) from the bottom of the humidifier. Flex it to loosen any mineral deposits or blockage. Then flush it with water under pressure. If it does not clear, replace it. Slip drain line back onto the drain fitting. Make sure the drain line has a constant downward slope and is not flattened or blocked.
12. Reconnect electrical power and turn on the water supply.
13. Check system operation:

**Manual Humidistat:** With the furnace blower operating and the furnace calling for heat, turn up humidistat and check system operation.

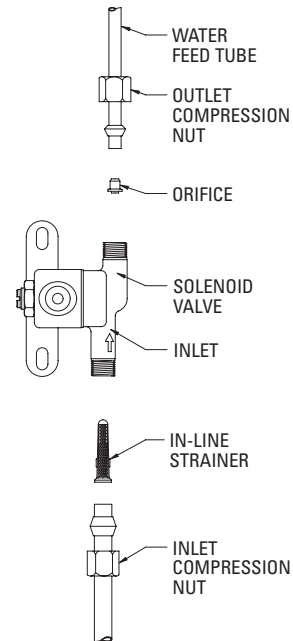
**Humidifier Control:** (Automatic or Manual mode) Check system operation and reset Change Water Panel indicator by turning the knob to "Test/Reset". With furnace blower operating and furnace calling for heat, humidifier will operate for one minute. **DO NOT LEAVE IN TEST MODE AS HUMIDIFIER WILL NOT OPERATE.**

14. Set Humidifier Control to its original position.

**NOTE: For additional instructions for cleaning the reservoir on Models 445 & 445A, see Owner's Manual.**

## Water Line Inspection and Service Instructions for All Models

The humidifier is equipped with an in-line water strainer. See the following instructions for strainer cleaning.



1. Disconnect electrical power to the furnace and shut off water supply.
2. Disconnect the water line at the inlet compression nut.
3. Remove the in-line strainer from inside the inlet side of the valve by using a small nail or wire.
4. Flush the in-line strainer clean or replace with a new strainer, Service Department, Part No. 4004.
5. Reconnect the inlet water line. **Double Wrench to Prevent Leaking.**
6. Disconnect the water feed tube at the outlet compression nut.
7. Inspect the water feed tube (plastic only) by gently flexing it and looking for cracks or signs of wear. Replace tube if it is cracked, brittle, or has been damaged.
8. Remove the orifice from the copper or plastic water feed tube and make sure this small opening is unplugged.
9. Replace the orifice with Part No. 4232 (blue – Model 440) or Part No. 4021 (red – Models 112 and 224) and reconnect the water feed tube. **Double Wrench to Prevent Leaking.**
10. Turn on water supply and reconnect electrical power to the furnace.

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