

AprilAire®

Humidifier

MAINTENANCE INSTRUCTIONS

Series 800

Steam Humidifier

⚠ WARNING

ELECTRIC SHOCK HAZARD. Disconnect main electrical power to the humidifier at the circuit breaker and drain the water from unit before servicing. Hot surface inside.

NOTICE

- Service should be performed by an HVAC technician.
- Use only genuine AprilAire replacement parts.

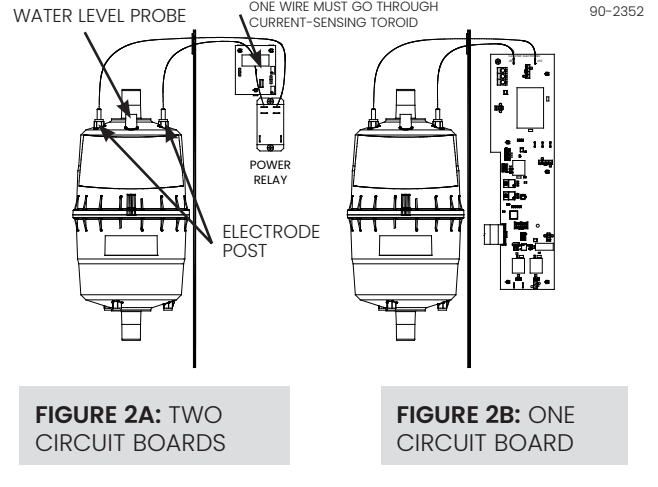
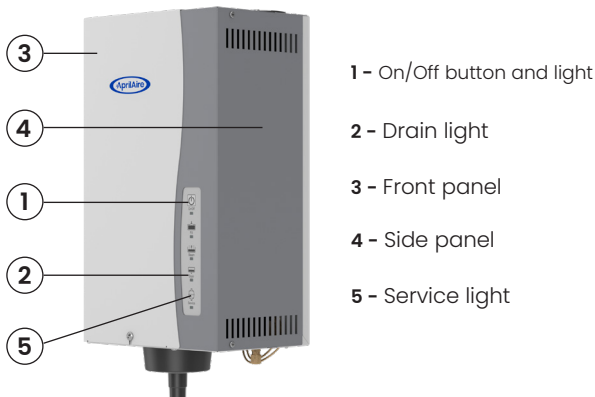
INSPECT HUMIDIFIER WHEN SERVICING

- Replace canister and O-ring annually
- Clean drain valve and fill valve screen annually
- Replace electrode wires every 3 years or as needed (see step 3 of **CANISTER REPLACEMENT AND DRAIN VALVE SERVICE**)

SERVICE SHUTDOWN PROCEDURE

1. Press **On/Off** button to turn humidifier off (see **FIGURE 1**).
2. Allow humidifier to drain.
3. When the green **Drain** light (see **FIGURE 1**) stops flashing, disconnect main electrical power to humidifier at the circuit breaker.
4. Allow the unit to cool.
5. Shut off water supply to unit.

FIGURE 1: STEAM HUMIDIFIER



CANISTER REPLACEMENT AND DRAIN VALVE SERVICE

1. Remove front panel (see **FIGURE 1**).
2. Pull three wires off posts on top of canister (two electrode wires and one water level probe wire, shown in **FIGURE 2A** and **FIGURE 2B**).
3. Inspect the two electrode wires (see **ELECTRODE WIRE REPLACEMENT** section for detailed instructions). **Replace them if they are:**
 - Not tightly fitting
 - Damaged
 - Over 3 years old or age is unknown
 - Have D shaped connectors (see **FIGURE 3A**)
4. Loosen hose clamp at top of canister. Slide steam hose off top of canister (see **FIGURE 4**).

FIGURE 3A:
"D" SHAPED CONNECTOR

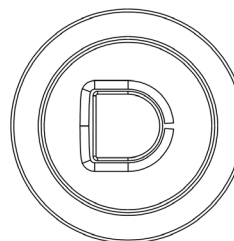
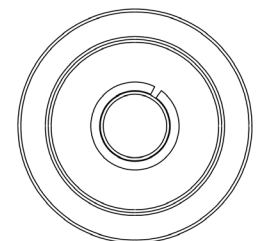


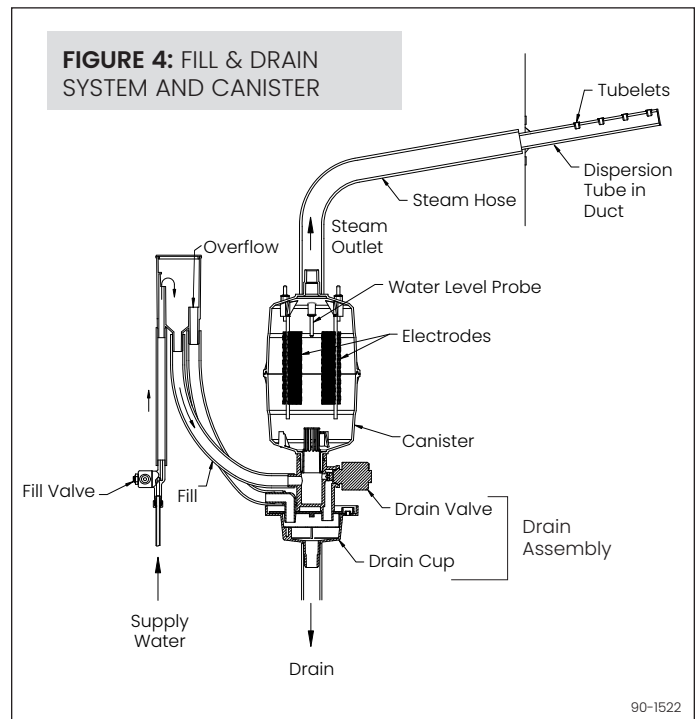
FIGURE 3B:
"O" SHAPED CONNECTOR



5. Slide canister up and out of drain assembly (see **FIGURE 4**). Discard old canister.
6. Remove O-ring from drain assembly using small screwdriver. Discard old O-ring.
7. With your finger, swirl the fluid/precipitate mixture in the bottom of the drain valve reservoir (see **FIGURE 4**).
8. Using a sponge or paper towels, soak up the water in the reservoir. If necessary, use a wet/dry vacuum to remove residue.
9. Clean the inside of the drain port (where coil projects out) by gently swabbing with a bent cotton swab or other soft implement.
10. Rinse the drain valve reservoir with clean water and vacuum as necessary.
11. Insert new O-ring (Part #5258) into slot in drain assembly. Dampen O-ring with water before inserting canister. Do not use oil, grease, or any lubricant besides water.
12. Make sure strainer is inserted into bottom of new canister.
13. Insert new canister into drain assembly (see **FIGURE 4**).
14. Slip steam hose over top of canister and tighten hose lamp (see **FIGURE 4**).
15. Reconnect the electrode wires and water level probe wire to the posts on top of the canister (see **Figure 2A** and **Figure 2B**). Electrode wires are interchangeable and can be placed on either of the two electrode posts on top of the canister. **Ensure connectors are fully seated.**

ELECTRODE WIRE REPLACEMENT

1. Remove front panel (see **FIGURE 1**).
2. Remove side panel (see **FIGURE 1**).
3. Remove the electrode wires (see **FIGURE 2A** and **FIGURE 2B**).
 - a. For units with one circuit board: Use needle nose pliers to pull the spade connectors off spade terminals J8 and J10 on the circuit board.
 - b. For units with two circuit boards: Use needle nose pliers to pull the spade connectors off the spade terminals on the power relay.
4. Ensure the two replacement electrode wires (Part #4978) have "O" shape connectors (see **FIGURE 3B**). **Do not use replacement wires with "D" shape connectors** (see **FIGURE 3A**).
5. Attach the new electrode wires (see **FIGURE 2A** and **FIGURE 2B**).
 - a. For units with one circuit board: Use a pair of needle nose pliers to attach the spade connectors to the spade terminals J8 and J10 on the circuit board. Electrode wires are interchangeable and can be placed on either of the two terminals.
 - b. For units with two circuit boards: Use a pair of needle nose pliers to attach the connectors to the spade terminals on the power relay. **One wire, either one but not both, must go through current-sensing toroid** (see **FIGURE 2A**). Electrode wires are interchangeable and can be placed on either of the two terminals.



FILL VALVE SERVICE

1. Disconnect water supply line from fill valve inlet (see **FIGURE 4**).
2. Remove in-line strainer from the fill valve inlet port using a #8 or #10 sheet metal or wood screw with a minimum length of 0.5".
3. Clean or replace in-line strainer (Part #4004).
4. Reconnect water supply line to fill valve inlet (see **Figure 4**).

RESTORE UNIT TO SERVICE

1. Replace side panel if removed (see **FIGURE 1**).
2. Replace front panel (see **FIGURE 1**).
3. Inspect drain hose to make sure it is not blocked and has constant downward slope. Clean or replace if necessary.
4. Inspect and clean condensate pump (if used).
5. Inspect steam hose to make sure it has no low spots and has constant upward slope from humidifier to dispersion tube in duct. If dispersion tube is mounted below humidifier, inspect drip tee and drain trap.
6. Restore main electrical power to humidifier at circuit breaker.
7. Turn humidifier on and verify green **on/off** light is illuminated (see **FIGURE 1**).
8. Check system operation and inspect all plumbing connections and piping for signs of cracks or leaks.