# MAINTENANCE INSTRUCTIONS FOR Aprilaire HUMIDIFIERS Models 110, 112, 350, 360, 760 & 768

WARNING: 1. 120 volts may cause serious injury from electrical shock on Model 110, 112, 350, 760 & 768 humidifiers.

2. Rotating or electrical components may cause serious injury from contact. Keep hands and face clear when checking operation.

#### MODELS 110 & 112

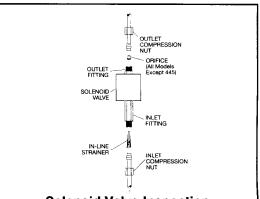
- 1. Disconnect electrical power and turn off water supply.
- Disconnect: a.) 120 volt supply, b.) Copper water supply line at inlet side of compression fitting, (double-wrench), c.) Drain hose, d.) 24 volt leads.
- 3. Disengage two swing locks, one on each side of unit.
- Lift humidifier straight up until bottom of unit clears lip of lower housing. Pull unit out at bottom, lower and remove.
- Loosen compression nut at valve outlet, (double-wrench), and remove feed tube clamp at top of unit. Remove copper feed tube.
- 6. Slide off three closure clips that hold the two halves of unit together.
- 7. Remove upper half of unit.
- 8. Remove Water Panel® and Scale Control Insert.
- Remove Water Panel and Insert and clean Insert by flexing or using putty knife. Inspect Water Panel (Model 110-Stock No.10, Model 112-Stock No.12) and replace, if necessary, according to instructions on carton.
- 10. Flush drain with water under pressure. Lime in hose may be loosened by flexing hose.
- 11. Remove the water distribution pan cover and clean "V" openings in water distribution section but **DO NOT** scrape off granular coating from bottom. This helps to ensure proper, even water flow for maximum performance.
- 12. Oil motor with two drops of SAE 20 oil in oil holes at each end of motor housing.
- 13. IMPORTANT: When installing the Scale Control Insert and Water Panel in the humidifier, the Insert spout must discharge directly into unit drain.
- 14. Reassemble unit, position feed tube in compression fitting, tighten compression nut, doublewrench and secure copper feed tube to upper housing with feed tube clamp.
- 15. In reverse order, complete steps 1 through 4 to reinstall your humidifier and check operation.
- 16. Set humidistat or Control to its original position.

#### MODEL 350 & 360

- 1. Disconnect electrical power and turn off water supply.
- 2. Remove screws of the plastic inlet framed grille. The grille can now be removed from the metal housing.
- 3. Lift the complete plastic framed evaporative section out of the humidifier housing.
- 4. To remove black plastic water distribution tray from evaporative section, push down on tray and pull out on white plastic frame (Scale Control Insert). To clean the "V" openings of the tray it will be necessary to gently pry the distribution cover from the tray. In this cleaning procedure, **DO NOT** scrape off the granular coating from the bottom of the tray. This helps to ensure proper, even water flow for maximum performance.
- 5. Remove Water Panel from Scale Control Insert and clean Insert by flexing or using putty knife. Inspect Water Panel (Stock No. 35) and replace, if necessary, with colored spot UP. Snap plastic cover into tray and tray into Scale Control Insert.
- 6. Flush drain line with water under pressure. Lime in hose may be loosened by flexing hose.
- 7. Reinstall complete plastic framed evaporation section and inlet grille.
- 8. Reconnect electrical power.
- 9. Turn on water supply and check unit operation.
- 10. Set humidistat or Control to its original position.

#### MODEL 760 & 768

- 1. Disconnect electrical power and turn off water supply.
- 2. Unlatch humidifier cover assembly from base assembly at the bottom of the cover, lift and set aside.
- 3. Pull out the evaporative assembly by lifting and pulling out bottom.
- 4. Remove the black distribution tray from evaporative assembly by unsnapping the white plastic holding strips from the tabs at the end of the tray. Lightly scrape out any calcium deposits and clean the "V" notches but **DO NOT** scrape off the granular coating from the bottom. This textured surface helps ensure even water flow for maximum performance.
- 5. Slide the Water Panel evaporator out from the white plastic scale control insert. Clean the insert frame by twisting and flexing it to loosen the calcium deposits or use a putty knife. Replace Water Panel evaporator annually with a new Water Panel evaporator Stock No. 35. Slide the Water Panel evaporator back into the scale control insert with the red colored spot up and snap the black distribution tray back into place.
- 6. Reinstall the evaporative assembly into the base assembly. Push the evaporative assembly in at the top between the retaining ribs that hold the assembly in place in a vertical position, then push assembly in at bottom.
- 7. Remove the drain hose from the bottom of the unit. Bend and flex it to loosen the internal calcium deposits. Then flush it with water under pressure and slip it back onto the drain fitting.
- 8. Reinstall cover assembly by hooking at the top of base assembly and latching at the bottom.
- 9. Reconnect electrical power, turn on water supply, and check unit operation.
- 10. Set humidistat or control to its original position.



### Solenoid Valve Inspection and Service Instructions

- Disconnect electrical power to the furnace and shut off water supply.
- 2. Disconnect the water line at the inlet fitting.
- 3. Remove the in-line strainer from inside the inlet fitting by using a small nail or wire.
- Flush the in-line strainer clean or replace with a new strainer, Service Department, Part No. 4004.
- 5. Disconnect the water line at the outlet fitting.
- Remove the orifice from the copper or plastic tube and make sure this small opening is unplugged.
- Replace the orifice and reconnect the outlet water line (Double Wrench To Prevent Leaking or Valve Breakage).
- Replace the in-line strainer and reconnect the inlet water line (Double Wrench To Prevent Leaking or Valve Breakage).
- 9. Turn on water supply and reconnect electrical power to the

### MAINTENANCE INSTRUCTIONS FOR Aprilaire HUMIDIFIERS Models 220, 224, 440, 550, 558, 560 & 568

CAUTION: Sudden operation may cause personal injury or property damage on Model 220, 224, 440, 550, 558, 560 & 568 humidifiers. Turn humidistat to "OFF" or lowest setting before servicing or troubleshooting these units.

#### **MODELS 220 & 224**

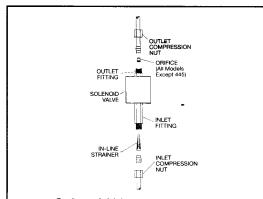
- 1. Turn off water supply and turn humidistat to "OFF".
- 2. Remove three "Z" clips that hold top half of unit to furnace plenum.
- 3. Slide off 4 closure clips that hold two halves of unit together.
- Loosen compression nut on the copper feed tube on the outlet side of the solenoid valve, double-wrench and remove copper tube.
- 5. Remove top screw holding sheet metal duct or elbow to humidifier.
- 6. Remove top half of unit (lift straight up).
- Remove the water distribution pan cover and clean "V" openings in water distribution section but **DO NOT** scrape off granular coating from bottom. This helps to insure proper, even water flow for maximum performance
- 8. Remove Water Panel<sup>®</sup> and Scale Control Insert. Remove Water Panel from Insert and clean Insert by flexing or using putty knife. Inspect Water Panel and replace, if necessary, according to instructions on carton. (Model 220-Stock No.10, Model 224-Stock No.12)
- 9. Remove drain hose and flush with water under pressure. Lime in hose may be loosened by flexing hose.
- IMPORTANT: When installing the Scale Control Insert and Water Panel in the Unit, the Insert spout must discharge directly into unit drain.
- 11. Reassemble unit, position feed tube in compression fitting, tighten compression nut, double-wrench and secure copper feed tube. Attach to furnace plenum.
- 12. Turn up humidistat and check unit operation.
- 13. Set humidistat or Control to its original position.

### MODEL 440

- 1. Turn off water supply and turn humidistat to "OFF".
- Remove two aluminum knobs and remove top cover from humidifier.
- 3. Place finger under plastic nozzle at top of black plastic water distribution tray. Lift up to pop nozzle loose from hole and notch in black plastic distribution tray. Tip forward and lift the complete plastic framed evaporative section out of the humidifier.
- 4. To remove black plastic water distribution tray from evaporative section, push down on tray and out on white plastic frame (Scale Control Insert). Clean "V" openings in tray but **DO NOT** scrape off granular coating from bottom. This helps to ensure proper, even water flow for maximum performance.
- Remove Water Panel from Scale Control Insert and clean Insert by flexing or using putty knife. Inspect Water Panel and replace, if necessary, according to instructions on carton.
- 6. Reinstall evaporative section in the humidifier with notch and hole and black plastic water distribution tray toward you. Pop nozzle fitting on end of feed tube into black plastic water distribution pan.
- 7. To reinstall top cover, slide onto top of metal frame and replace two aluminum knobs.
- 8. Remove drain hose and flush with water under pressure. Lime in hose may be loosened by flexing hose.
- Reattach drain hose.
- 10. Turn up humidistat and check unit operation.
- 11. Set humidistat or Control to its original position.

### MODELS 550, 558, 560 & 568

- 1. Turn off water supply and turn humidistat to "OFF".
- 2. At the side of the unit opposite the airflow duct, pull front cover off holding with both hands and set aside.
- 3. Carefully pull the black feed tube out of the nozzle at the top of the Water Panel evaporator assembly. Pull this assembly out by grasping at top and tipping out.
- 4. Remove the black plastic distribution tray from the evaporator assembly by unsnapping the white plastic holding strips from the tabs at the end of the tray. Lightly scrape out any calcium deposits and clean the "V" notches, but **DO NOT** scrape off the granular coating from the bottom. This textured surface helps ensure even water flow for maximum performance.
- 5. Slide the Water Panel out from the white plastic Scale Control Insert, clean the insert frame by twisting and flexing it to loosen the calcium deposits, or use a putty knife. Inspect the Water Panel (Model 550-Stock No.10, Model 560-Stock No.35) and replace, if necessary, according to instructions on carton.
- 6. Reinstall the Water Panel assembly into the unit by fitting its drain tube into the round receptacle at the base of the unit. Push the assembly in at the top against the beveled tabs that will hold it in place. Push the end of the feed tube back firmly into the nozzle and replace the front cover.
- 7. Remove drain hose from the bottom of the unit and bend and flex it to loosen the internal calcium deposits. Then flush it with water under pressure and slip it back onto the black drain fitting.
- 8. Turn on water supply.
- 9. Turn up humidistat and check unit operation.
- 10. Set humidistat or Control to its original position.



# Solenoid Valve Inspection and Service Instructions

- Disconnect electrical power to the furnace and shut off water supply.
- 2. Disconnect the water line at the inlet fitting.
- Remove the in-line strainer from inside the inlet fitting by using a small nail or wire.
- Flush the in-line strainer clean or replace with a new strainer, Service Department, Part No. 4004.
- Disconnect the water line at the outlet fitting.
- Remove the orifice from the copper or plastic tube and make sure this small opening is unplugged.
- 7. Replace the orifice and reconnect the outlet water line (Double Wrench To Prevent Leaking or Valve Breakage).
- Replace the in-line strainer and reconnect the inlet water line (Double Wrench To Prevent Leaking or Valve Breakage).
- 9. Turn on water supply and reconnect electrical power to the furnace.

