

If the 'TIME ONLY' resistor is used in place of the Outdoor Temperature Sensor, the Controller's operation is determined by the adjustable timer settings only – the Controller does not limit the operation based on the temperature and humidity limits shown in Figure 3.

If a jumper wire is used in place of the Outdoor Temperature Sensor, the Controller will disregard the temperature setting and base the ventilation on the indoor relative humidity and the user-adjustable timer settings. In this application, the Controller will not ventilate when the indoor relative humidity rises above 55%.

IV. LIMITED WARRANTY

Your Research Products Corporation Aprilaire® Ventilation Controller is expressly warranted for five (5) years from date of installation to be free from defects in materials or workmanship.

Research Products Corporation's exclusive obligation under this warranty shall be to supply, without charge, a replacement for the Controller which is found to be defective within such five (5) year period and which is returned not later than thirty (30) days after said five (5) year period by you to either your original supplier or to Research Products Corporation, Madison, Wisconsin 53701, together with the installation date of the Controller.

THIS WARRANTY SHALL NOT OBLIGATE RESEARCH PRODUCTS CORPORATION FOR ANY LABOR COSTS AND SHALL NOT APPLY TO DEFECTS IN WORKMANSHIP OR MATERIALS FURNISHED BY YOUR INSTALLER AS CONTRASTED TO DEFECTS IN THE CONTROLLER ITSELF.

IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE AFORESAID FIVE YEAR PERIOD. RESEARCH PRODUCTS CORPORATION'S LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OTHER THAN DAMAGES FOR PERSONAL INJURIES, RESULTING FROM ANY BREACH OF THE AFORESAID IMPLIED WARRANTIES OR THE ABOVE LIMITED WARRANTY IS EXPRESSLY EXCLUDED. THIS LIMITED WARRANTY IS VOID IF DEFECT(S) RESULT FROM FAILURE TO HAVE THIS UNIT INSTALLED BY A QUALIFIED HEATING AND AIR CONDITIONING CONTRACTOR. IF THE LIMITED WARRANTY IS VOID DUE TO FAILURE TO USE A QUALIFIED CONTRACTOR, ALL DISCLAIMERS OF IMPLIED WARRANTIES SHALL BE EFFECTIVE UPON INSTALLATION.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages so the above exclusion or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

WARRANTY REGISTRATION

Please... Take a few minutes to visit us on-line at
www.aprilaire.com

to register your Aprilaire product.

If you do not have on-line access, please mail a postcard with your name, address, phone number, product purchased and date of purchase to:

Research Products Corporation
P.O. BOX 1467
Madison, WI 53701

Thank you!

Your Warranty Registration information will not be sold or shared outside of this company.

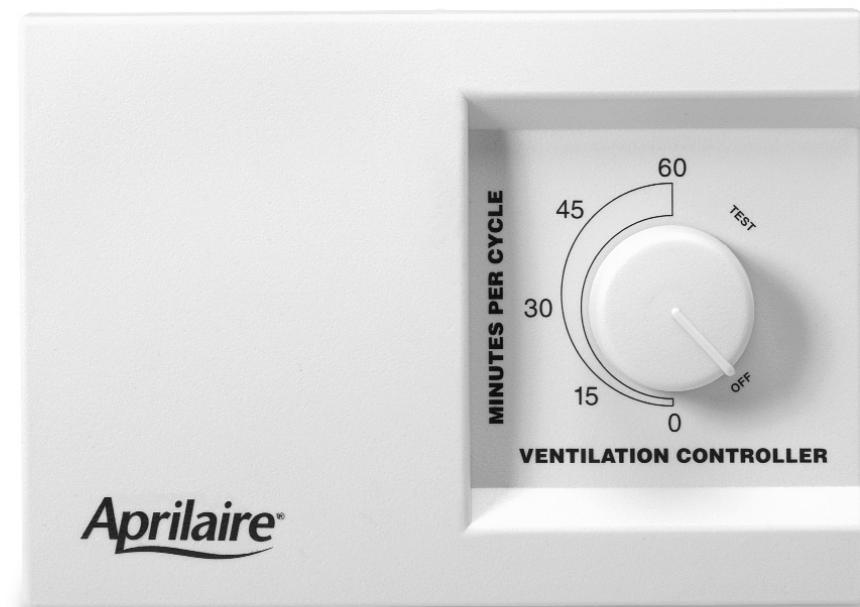
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Aprilaire®

Ventilation Controller



Aprilaire®

Model 8120 Ventilation Controller Owner's Manual

**Includes Safety & Operating Instructions
and Warranty Information**

WARNING 120 volts may cause injury from electrical shock. Disconnect power before servicing.

CAUTION Sudden operation may cause personal injury or property damage. Turn Ventilation Controller to "OFF" before servicing.

READ AND SAVE THESE INSTRUCTIONS

I. PRINCIPLE OF OPERATION

With your purchase of the Aprilaire® Ventilation Controller, you have invested in an intelligent way of providing fresh air to your home. Working in conjunction with an Aprilaire® Damper, the Ventilation Controller makes decisions regarding when – and how long – to ventilate. It does this through continuous monitoring of indoor relative humidity, outdoor temperature, and user-adjusted timer settings.

Indoor relative humidity is monitored to help prevent high humidity conditions inside your home. The Aprilaire® Ventilation Controller will not open the damper to the outside air if there is a chance of raising the humidity inside the house to high levels. The Aprilaire® Ventilation Controller is designed to prevent indoor relative humidity levels from increasing beyond 60% due to ventilation.

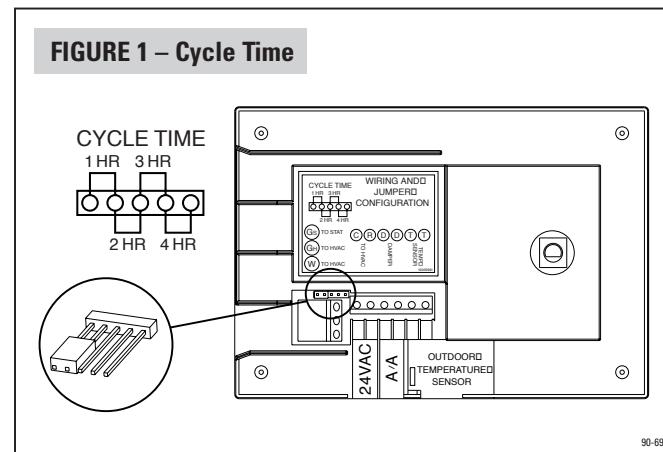
If the outdoor air temperature is below 0°F or above 100°F, the motorized normally-closed damper to the outside will not be opened. This feature can be disabled at installation if the installer chooses not to use outdoor air temperature as a parameter.

II. OPERATING INSTRUCTIONS

Your Ventilation Controller is installed in the return duct of your furnace or heat pump. There are two settings that are adjustable: the **cycle time** and the **ventilation time** within cycle. Here's how this works: if you set the **cycle time** to 1 hour and the **ventilation time** knob to 20 minutes, you will get 20 minutes of ventilation every hour. It is important to understand that the ventilation requirement – 20 minutes per hour in this example – may be satisfied by a heating, cooling, or fan call initiated by your thermostat, **or** from a fan call initiated by the Ventilation Controller itself. The following steps explain how to adjust these settings.

1. SETTING THE CYCLE TIME INTERVAL

- Remove the knob by pulling it straight out from the controller. Remove the cover by grabbing along the top and bottom edges of the cover and pulling straight out from the base. Refer to Figure 1 to locate the cycle time header & jumper.



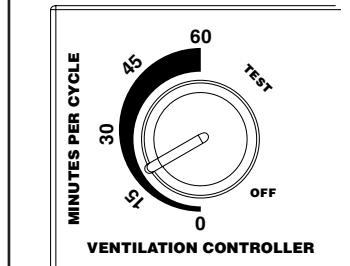
- The jumper on the 5 pin header determines the cycle time interval. The interval can be 1, 2, 3 or 4 hours. (The default setting is 1 hour.)
- Move the jumper to the desired setting. The jumper can be removed by pulling it straight out from the header pins.
- Snap the cover back on the controller and slide the knob onto the shaft.

2. SETTING THE VENTILATION TIME

- The knob on the exterior of the controller is used to set the ventilation time within the interval you set in Step 1.
- The knob settings range from "OFF" which is all the way counter-clockwise, to "TEST"† which is all the way clockwise. While labeled in 15 minute increments, the controller may be adjusted within the 15 minute interval to the nearest minute.

† Test mode is used to check the device at installation. In Test mode the Ventilation Controller activates the HVAC fan and opens the damper for one minute or until the knob is taken off the "Test" setting, whichever occurs first. After the minute has passed, the Ventilation Controller will not work until the knob is taken off "Test."

FIGURE 2 – Ventilation Time

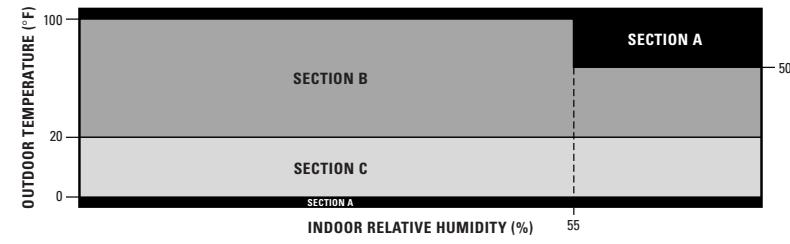


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III. OUTDOOR TEMPERATURE & INDOOR HUMIDITY CONTROL LIMITS

In a standard installation, your Aprilaire Ventilation Controller will use measurements of Outdoor Temperature and Indoor Humidity, along with the user-adjustable timer settings, to determine when to ventilate. Outdoor Temperature is measured with a sensor placed at the inlet of the fresh air intake duct. Indoor Humidity is measured in the return duct with a sensor built into the Controller. In conjunction with the timer settings, the Controller then operates according to the temperature and humidity control limits shown in Figure 3 below.

FIGURE 3 – Model 8120 Operating Limits



SECTION A: Controller will not ventilate due to temperature extremes

SECTION B: Controller will ventilate according to timer settings

SECTION C: Controller will ventilate only when heating is on according to the timer settings

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