



Aprilaire E080CS Dehumidifier for Crawl Spaces Owner’s Manual

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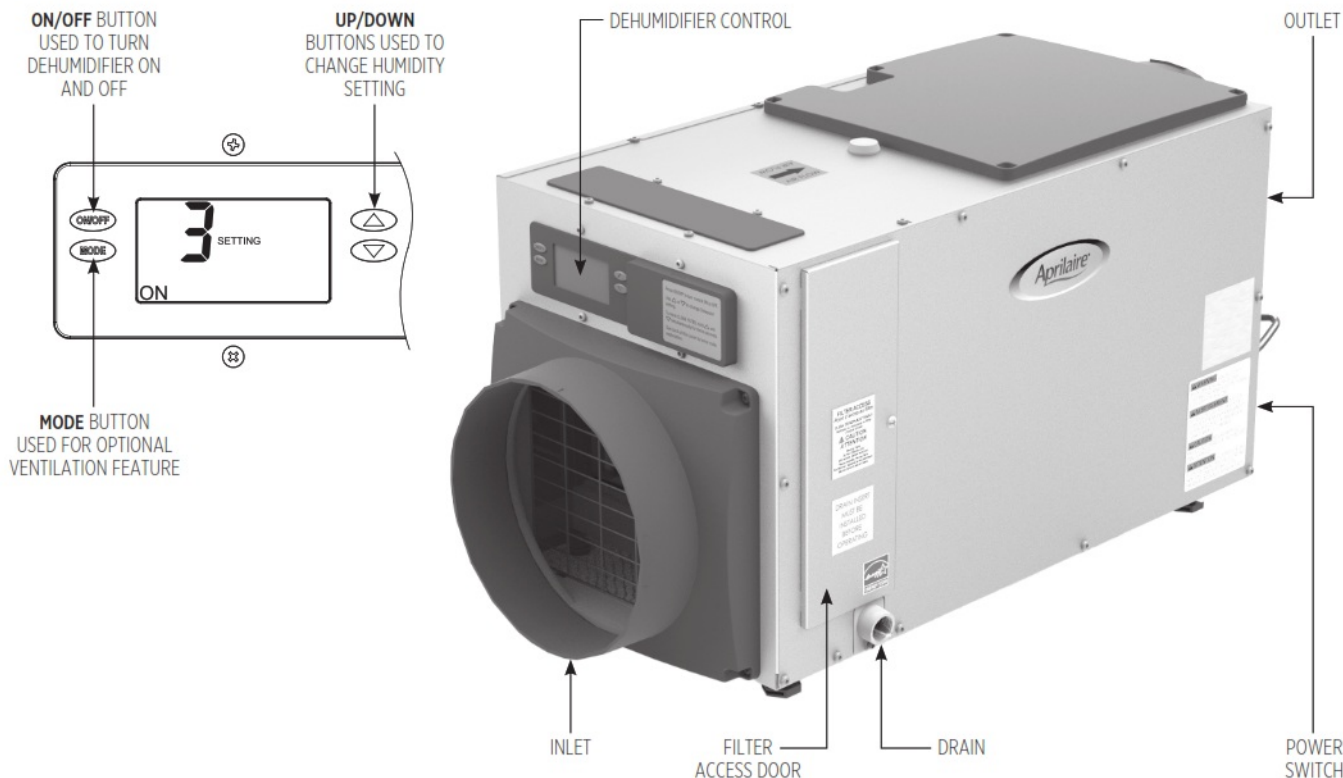
Model E080CS & E100CS Dehumidifier
Owner’s Manual

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PLEASE LEAVE THIS MANUAL WITH THE HOMEOWNER

INSTALLED BY:	INSTALLER PHONE:	DATE INSTALLED:
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PRINCIPLES OF DEHUMIDIFICATION

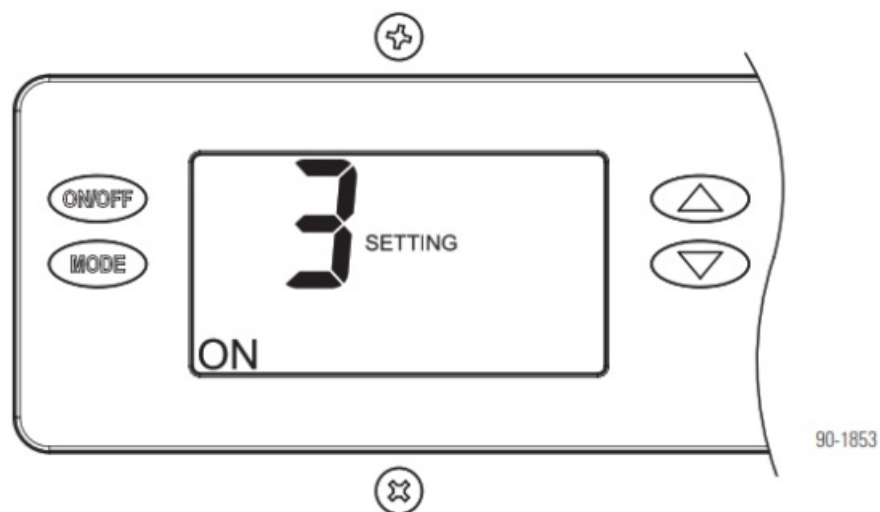
The Aprilaire® Dehumidifier controls the humidity level in your crawl space. A powerful blower inside the dehumidifier draws air into the cabinet, filters the air and removes moisture, then discharges the dry air into the crawl space. Inside the cabinet, a sealed refrigeration system removes moisture by moving the air through the evaporator coil that is kept colder than the dew point of the incoming air. The dew point is the temperature at which moisture in the air will condense, much like what occurs on the outside of a cold glass on a hot summer day. The condensed moisture drips into the dehumidifier drain pan, where it flows to a drain tube that routes it to the nearest floor drain or condensate pump. After the moisture is removed, the air moves through the condenser coil where it is reheated before being discharged back into the space. The air leaving the dehumidifier will be warmer and drier than the air entering the dehumidifier.

SETTING THE DESIRED HUMIDITY LEVEL

The dehumidifier can be set up to control based on dew point or relative humidity (%RH).

DEW POINT CONTROL

The dehumidifier on-board control will display the dryness setting when not running, and displays the measured humidity when running.



The UP and DOWN arrow buttons allow the dryness setting to be set from 1 to 7. Use the ON/OFF button to turn the dehumidifier ON or OFF.

Set the control at 3 for initial operation. This setting and the corresponding dew point are recommended for preservation and preventing condensation on floor joists. Allow the dehumidifier to run until it reaches the setting before deciding if you want to change the setting.

- If you prefer the air to be drier, increase the dryness level.
- If you prefer the air to be less dry, decrease the dryness level.

See **Table 1** for dryness settings and corresponding dew point (DP).

TABLE 1 – %RH (+1– 5%) Based on Dryness Setting and Crawl Space Temperature			
Dryness Setting & Dew Point	Crawl Space Temperature		
	60°F	65°F	70°F
1 — Less, than 65°F DP			84%
2 — 61°F DP		86%	73%
3 — Normal, 57°F DP	88%	74%	63%
4 — Normal, 53°F DP	76%	64%	54%
5 — Normal, 49°F DP	65%	55%	46%
6 — 46°F DP	55%	47%	39%
7 — Most Dry, 42°F DP	47%	40%	34%

EXAMPLE: At a crawl space temperature of **70°F** and a dryness level of the setting of **3 (57°F DP)**, the dehumidifier will work to achieve a **63%** relative humidity level.

- The %RH values are +/- 5% and are to be used as a GUIDE ONLY.
- The crawl space temperature is measured at the dehumidifier inlet.

HUMIDITY CONTROL

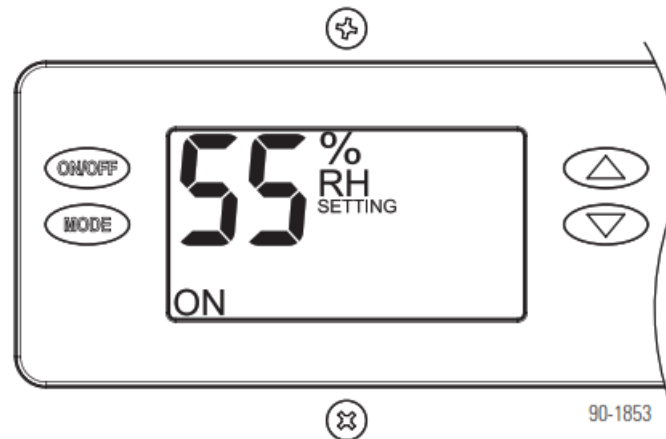
The dehumidifier on-board control will display the humidity setting when not running, and displays the measured

humidity when running.

The UP and DOWN arrow buttons allow the humidity level to be set from 40% to 80% relative humidity. Use the ON/OFF button to turn the dehumidifier ON or OFF.

Set the control at 55%RH when first installed. Allow the dehumidifier to run until it reaches the setting before deciding if you want to change the setting.

- If you prefer the air to be drier, decrease the humidity setting.
- If you prefer the air to be less dry, increase the humidity setting.



Your comfort is the best measure of how to adjust your setting. When first installed, your dehumidifier has to remove all the moisture that is initially in your home. The home acts like a sponge so the moisture in the materials of your home is at the same level as the air. After drying the air, the materials of the home will release moisture back into the air until they are again at the same level. As a result, it is not uncommon for the dehumidifier to operate for an extended period when first installed.

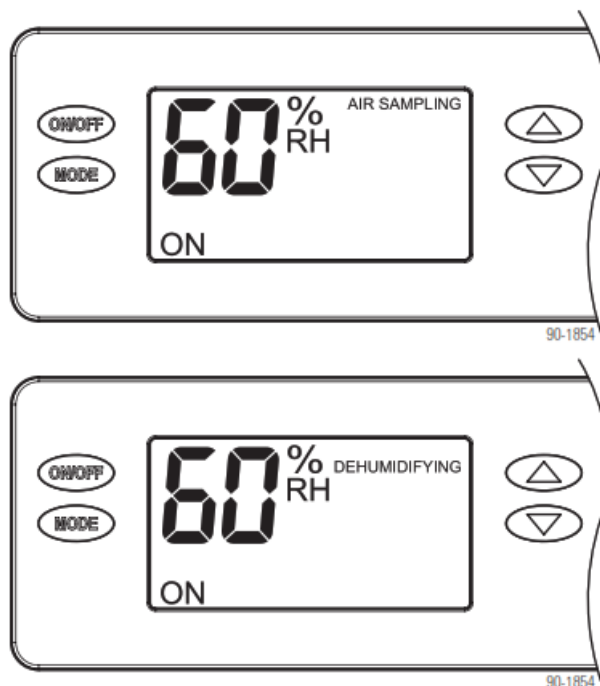
ENERGY SAVINGS TIPS

Energy Savings Tip #1: Adjust the humidity setting to be as high as is comfortable to reduce dehumidifier run time. If it feels clammy or “smells musty”, lower the humidity setting. To save energy, turn the dehumidifier OFF when you open your windows, just as you would with air conditioning.

Energy Savings Tip #2: If vacating your home for an extended period in the summer, set the RH at 55% and set your thermostat as high as you are comfortable setting it to in the cooling mode. Consult with appropriate professionals regarding the highest temperature that is safe for your pets or possessions. This will keep the humidity at a controlled level while minimizing the amount of cooling energy used.

HOW DOES THE DEHUMIDIFIER WORK?

Once per hour the dehumidifier will measure the humidity level of the air and compare it to the humidity setting. If the humidity in your home is higher than the setting, the dehumidifier will dehumidify the air until the humidity level drops below the setting.



When the dehumidifier turns on, the blower circulates the air for 3 minutes before measuring the humidity level of the air. The onboard control will display AIR SAMPLING, along with the measured humidity on the control screen. If the humidity of the air is higher than the setting, the compressor turns on and the control will display DEHUMIDIFYING, along with the measured humidity on the control screen.

HIGH DEW POINT / HIGH HUMIDITY ALERT

If the dehumidifier measures the dew point of the air to be 4°F or more or 6%RH or more above the setting for 72 consecutive hours, the ALERT LIGHT will turn on and the display will show “HI”. The dehumidifier will continue to operate as normal when the ALERT LIGHT is on. If the dew point falls within 4°F of the setting or relative humidity falls within 6%RH of the setting, the ALERT LIGHT will turn off.

The dehumidifier measures the conditions of the incoming air every five (5) minutes even if the dehumidifier is turned off (using the ON/OFF button) to determine if there is a high dew or humidity condition. Should the dehumidifier be turned off, the alert setting defaults to 57°F or 60%RH?

EXTERNAL CONTROL OPTIONS

Your Aprilaire dehumidifier can be controlled with the optional Aprilaire Model 76 remote control. Install the Model 76 in your living space and make changes to the dehumidifier setting or find out what the humidity level is in the crawl space from the comfort and convenience of the living space. Refer to the Model 76 Owner’s Manual for operating instructions. Aprilaire owner’s manuals are available at www.aprilaire.com.

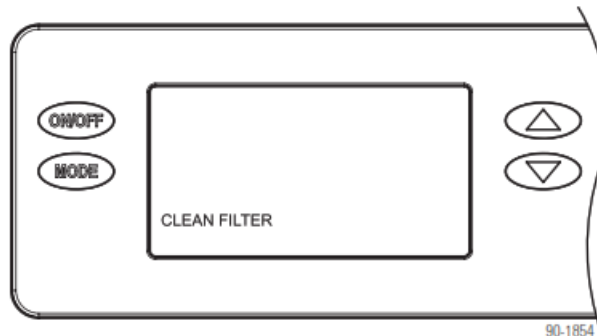
If you are interested in having a remote control installed, please consult your installing contractor.

Model 76 Control



MAINTENANCE

CLEAN OR REPLACE THE AIR FILTER



After initial installation, the air filter should be checked and cleaned every 6 months. The CLEAN FILTER service reminder will display on the onboard control screen every 6 months. To clear the service message, press the UP and DOWN arrows simultaneously for 3 seconds.

FILTER CLEANING PROCEDURE

- Turn the ON/OFF switch OFF.
- Remove the filter access door from either side of the dehumidifier.
- Slide the filter out of the dehumidifier.
- Flush the filter with warm water and a mild detergent solution.
- Shake off the excess water from the filter.
- When inserting the filter, make sure the filter is secured in the top and bottom rails. Safety clips are located along with the filter frame and will compress within the filter frame as the filter is installed. If the filter doesn't insert completely check for the presence and proper placement of the drain insert (see page 6).
- Replace the filter access door.
- Turn the ON/OFF switch ON.
- Press the UP and DOWN buttons simultaneously for 3 seconds to clear the service message.

CHECK THE DRAIN

The drain should be checked annually to ensure there are no blockages or airlocks in the drain system. If the unit is not draining properly, have it checked by a qualified service professional.

IMPORTANT! The drain insert is a critical feature of the dehumidifier drain management system. This component is required for the dehumidifier to run properly. If the drain insert is not installed, you will not be able to reinstall the air filter. The air filter is equipped with a safety mechanism that prevents you from fully inserting the filter without the drain insert installed.



WARNING

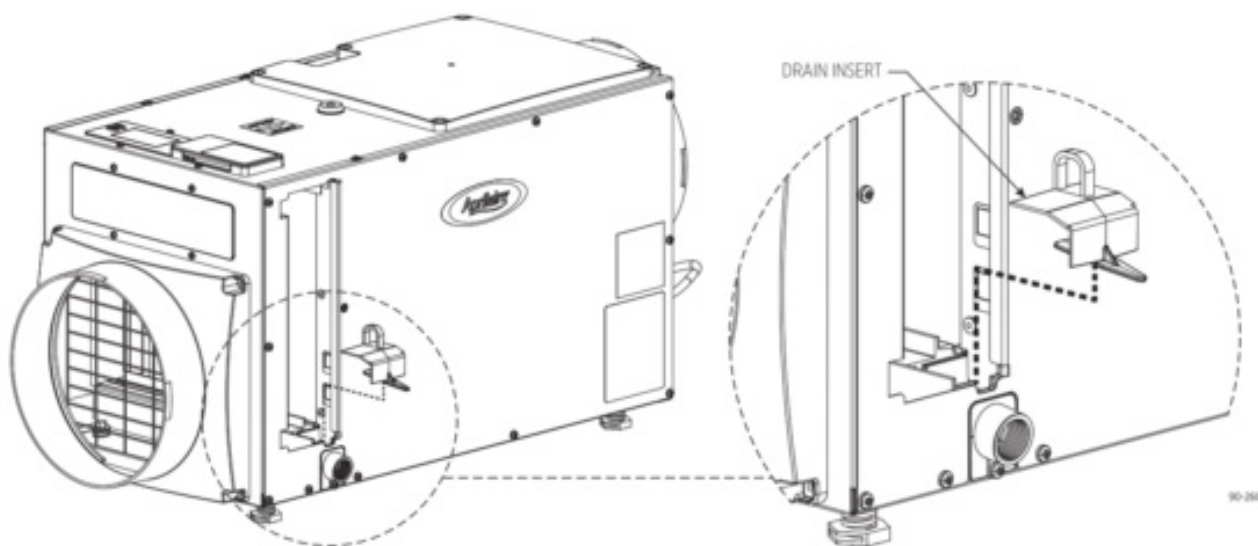
Running the dehumidifier without the drain insert can lead to condensate leaks.

REMOVING THE DRAIN INSERT

1. Turn the ON/OFF switch OFF.
2. Remove the filter access door from the drain side of the dehumidifier.
3. Remove the filter from the dehumidifier to access the drain insert.
4. Locate the drain insert which is located over the drain opening.
5. Remove the drain insert by hooking your finger into the finger loop and gently lift the insert up and out of the drain pan.
6. Clean the drain insert with warm water and mild detergent solution.

REINSTALLING THE DRAIN INSERT

1. Reinstall the drain insert by inserting your forefinger into the finger loop and grasping the outer edge of the finger loop with your thumb.
2. Gently insert the drain insert tip into the drain opening and tilt the insert downwards into place.
3. Ensure the drain insert is seated properly by checking the top surface of the drain insert is the same surface height as the filter guide channel.
4. Turn the ON/OFF switch ON.
5. At the UI control, select the ON/OFF button and switch to ON mode.

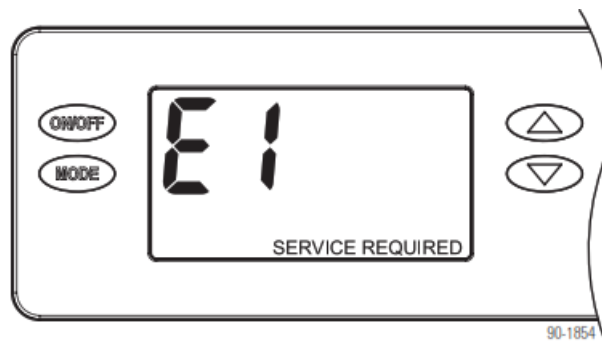


CAUTION

Do not use spray solvents or cleaners on or near the inlet side of the dehumidifier.
If desired, apply cleaner to a cloth and use it to clean the cabinet.

TROUBLESHOOTING

DIAGNOSTIC CODES



The on-board control will display a diagnostic code and the alert light will turn on if an error should occur and service is required. Contact your installing contractor if E1– E7 or HI is displayed on the onboard control screen. E8 will be displayed if the incoming air temperature is below 50°F, above 104°F, or when the dew point is below 40°F. When the incoming air is within the acceptable range, the dehumidifier will resume operation. If the error persists, contact your installing contractor.

When using a Model 76 as a remote control, the Model 76 display will show the diagnostic codes E1– E8. If there is a high dew point alert (HI), the Model 76 will display E0.

LIMITED WARRANTY

Your Research Products Corporation Aprilaire® A dehumidifier is expressly warranted for five (5) years from the 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 any component 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 model number and installation date of the dehumidifier.

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 DEHUMIDIFIER 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

Visit us online at www.aprilaire.com to register your Aprilaire product. If you do not have online access, please mail a postcard with your name, address, phone number, email address, product purchased, model number, date of purchase, and dealer name and address to **Research Products Corporation, P.O. Box 1467, Madison, WI 53701**

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



Trusted Solutions for a Healthy Home™

Aprilaire.com

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Documents / Resources

	<p>Aprilaire E080CS Dehumidifier for Crawl Spaces [pdf] Owner's Manual E080CS, E100CS, Dehumidifier for Crawl Spaces</p>
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References

- [AprilAire is Healthy Air](#)
- [AprilAire is Healthy Air](#)

Manuals+