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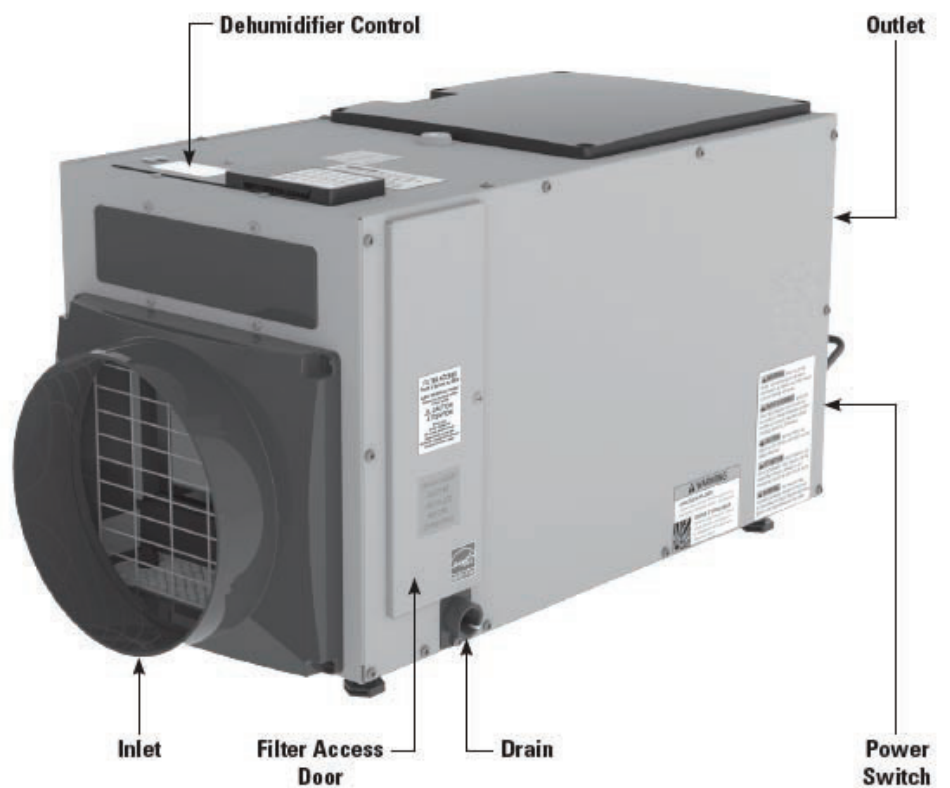
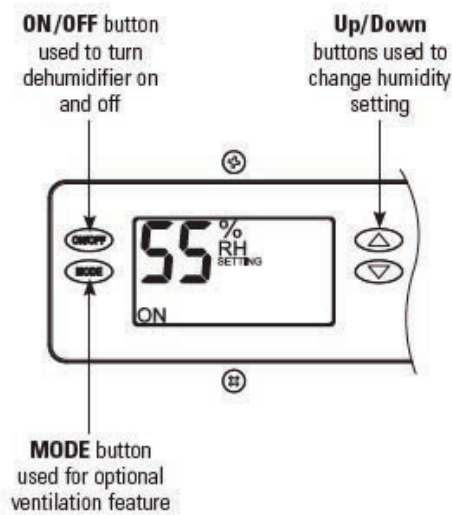
Dehumidifier with R-32 Refrigerant

DEHXXCDA1080AA04 & DEHXXCDA1100AA04

Dehumidifier Owner's Manual

PLEASE LEAVE THIS MANUAL WITH THE HOMEOWNER.

Installed by: _____ Installer Phone: _____ Date Installed: _____



90-2615

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Whole Home Dehumidification

The Whole Home dehumidifier controls the humidity level in your entire home. A powerful blower inside the dehumidifier draws air into the cabinet, filters the air and removes moisture, then discharges the dry air into the HVAC system or dedicated area of the home. Inside the cabinet, a sealed refrigeration system removes moisture by moving the air through a series of tubes and fins that are 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 to a drain tube routed to the nearest floor drain or condensate pump. After the moisture is removed, the air moves through a second coil where it is reheated before being sent back into the home. The air leaving the dehumidifier will be warmer and drier than the air entering the dehumidifier.

Operating The Dehumidifier

1. Use the ON/OFF Power Switch, located by the power cord, to apply power to the dehumidifier. (Fig. 1)

NOTE: The ON/OFF power switch should stay ON unless the unit will not be used for an extended period. Use the ON/OFF button on the control panel to turn the unit off for short durations. With the ON/OFF button in the ON position and the dehumidifier idle (neither the fan or compressor running) the unit will use less than 3W of power.

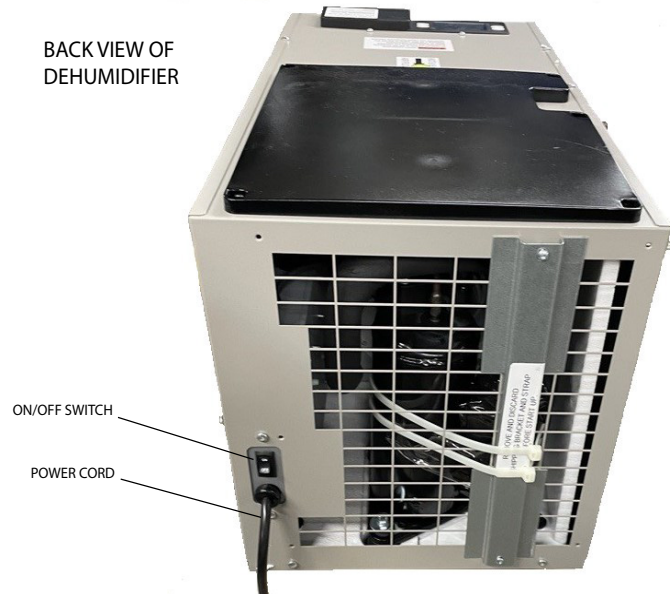


Fig. 1 – Back View of Dehumidifier

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2. Use the ON/OFF Button (Fig. 2) on the control panel to turn the dehumidifier ON. The first press of a button will turn on the display light, so if the display was dark, you might need to press it again. Once ON, the display will show the current dehumidifier setting.

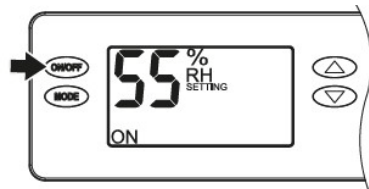


Fig. 2 – Turning the Dehumidifier On

OTD001

3. The dehumidifier blower will turn on, the word SETTING disappears from the display, and the words AIR SAMPLING appear (Fig. 3). This wording indicates that the dehumidifier is sampling the air to determine if dehumidification is needed and shows the measured humidity level. If the control is already ON, lowering the setting will initiate air sampling.

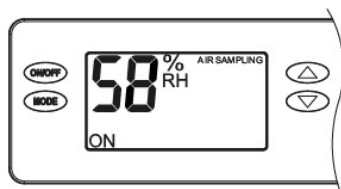


Fig. 3 – Air Sampling

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4. If the Relative Humidity (RH) is above the setting, the compressor turns on to dehumidify the space. The word DEHUMIDIFYING appears when the compressor is turned on (Fig. 4).

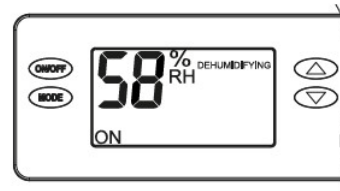


Fig. 4 – Dehumidifying

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Setting The Desired Humidity Level

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 more dry, 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 SAVING 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 to 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 (AIR SAMPLING) 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. (Fig. 5)

When the dehumidifier turns on, the blower circulates the air for 3 minutes before measuring the humidity level. The on-board 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.

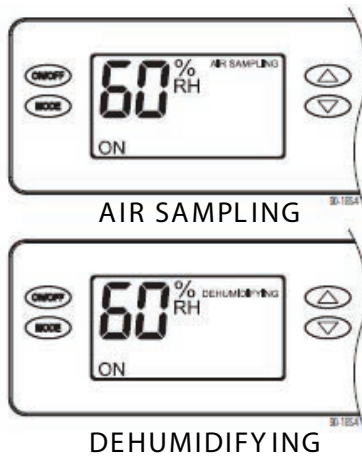


Fig. 5 – Air Sampling and Dehumidifying

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Optional - Heating And Cooling System Blower Operation

Your installing contractor may have configured the dehumidifier to turn on the heating and cooling system blower when the dehumidifier turns on to allow for improved circulation of the dry air.

External Control Options

Your dehumidifier can be controlled with an optional external control that is conveniently located in the living space.

The Model 76C can work as an external or a remote control when the dehumidifier is located in a crawl space. (Fig. 6) When used as an external control, the Model 76C controls humidity by measuring air conditions in the space where the control is located. When used as a remote control, the Model 76C is installed in your living space, where you can 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.

If Model 76C or any other external control is installed, please refer to their owner's manuals for operating instructions.

If you are interested in having an external control installed, please consult your installing contractor.



Fig. 6 – Optional Wall Control

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How Does The Optional Ventilation Work?

If you had your contractor install the optional ventilation feature, they calculated how much fresh air was needed based on various factors (i.e. home size, number of occupants, local building codes, etc.). Knowing how much is needed and the rate at which fresh air will be brought into your home, the contractor set up the dehumidifier control to operate ventilation a certain amount of time per hour to provide the needed fresh air. When ventilation operates, a damper in a duct that brings air in from the outside opens, and your heating and cooling system blower will run to distribute the fresh air.



Fig. 7 – Ventilation Mode

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If you need to change the amount of time to operate ventilation, press the MODE button twice to display the ventilation time setting. Use the UP or DOWN button to adjust the number of minutes per hour (0–60, set to zero to turn it off) that ventilation is to run. The control will return to the dehumidifier setting display automatically. (Fig. 7)

Maintenance

Clean Or Replace the Air Filter

After initial installation the air filter and drain should be checked and cleaned every 6 months.

1. Press the ON/OFF button on the control panel to turn the unit OFF.
2. Loosen the retaining screw on the filter access door (**Fig. 1**) from the drain side of the dehumidifier until it releases and then remove the filter door.
3. Slide the filter out of the dehumidifier.
4. Rinse the filter with water to remove dust and collected particles from the filter.
5. Shake off excess water from the filter.
6. Clean the drain as described in **Cleaning and Inspecting the Drain** in the next section.
7. Reinstall the filter. An arrow on the filter frame shows the direction of airflow and it should point into the dehumidifier.
8. If the filter does not slide back in, make sure the drain insert has been properly installed. (**Fig. 10**).
9. Replace the filter access door and tighten the retaining screw.
10. Press the ON/OFF Button to turn the dehumidifier back ON.

The CLEAN FILTER service reminder (**Fig. 8**) will display on the control every 6 months. To clear the service message, press the UP and DOWN buttons simultaneously for 3 seconds.

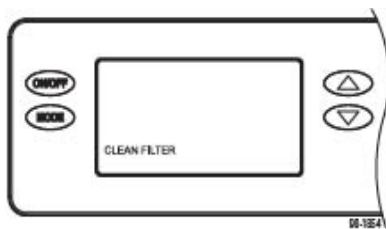


Fig. 8 – Clean Filter Service Reminder

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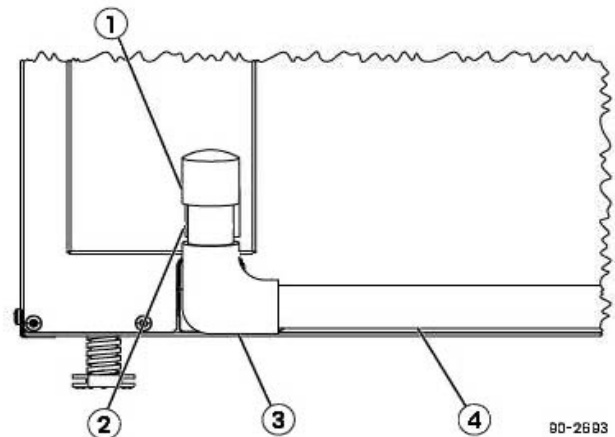
! WARNING

RISK OF ELECTRIC SHOCK. Can cause injury or death.
Disconnect all power supplies before servicing.

Cleaning and Inspecting the Drain

1. With the filter door on the drain side of the dehumidifier removed, reach in and pull out the drain insert using the finger loop. The drain should be checked annually to ensure there are no blockages or air lock in the drain system.
2. Clean the drain pan and drain insert using a mild detergent.
3. If the drain has a capped tee or elbow to allow cleaner to be poured directly in the drain, remove the cap and pour approximately one cup of vinegar into the tube (**Fig. 9**). If there is no visible access to the drain line from outside of the dehumidifier, pour approximately one cup of vinegar into the drain pan of the dehumidifier where the drain insert was located.
4. Reinstall the drain insert by gently placing the tip into the drain opening and rocking the insert downwards into place. When inserted properly, the top of the drain insert will be at the same height as the filter guide channel.
5. If the dehumidifier has clear flexible drain tubing, look for excess buildup in the drain line that might prevent water flow, and replace as needed. Clear, smooth, flexible 3/4" inner (ID) drain tubing is available in most hardware stores or Do-It- Yourself (DIY) retail stores.

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.



Capped Drain Access for Cleaning

- | | |
|---------------------------------|---------------------------------------|
| 1 - Cap | 3 - 3/4" 3-Way elbow or Tee and elbow |
| 2 - Small Section of Drain Tube | 4 - Condensate Drain Line |

Fig. 9 – Capped Drain Access for Cleaning

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CAUTION

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



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 to clean the cabinet.



WARNING

RISK OF FIRE OR EXPLOSION:



1. Flammable refrigerant used.
2. To be repaired only by trained service personnel.
3. Do not puncture refrigerant tubing.

4. Store in well ventilated room without continuously operating flames or other potential ignition sources.
5. Auxiliary devices which may be ignition sources shall not be installed in duct work.
6. Consult Repair Manual/Owner's Guide before attempting to service this product. All safety precautions must be followed.
7. Dispose of properly in accordance with Federal or local regulations.

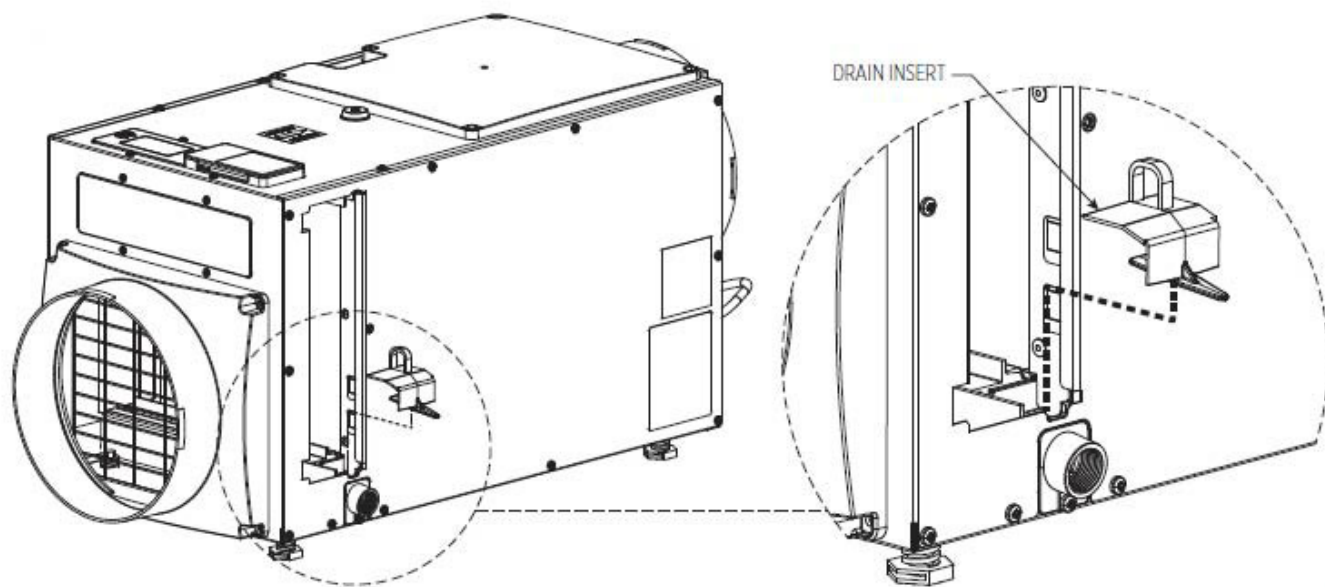


Fig. 10 – Drain Insert

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Troubleshooting

Diagnostic Codes

The on-board control will display a diagnostic code if an error should occur and service is required. (Fig. 11)

Contact your installing contractor if E1– E7 or E9 is displayed on the on-board 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.

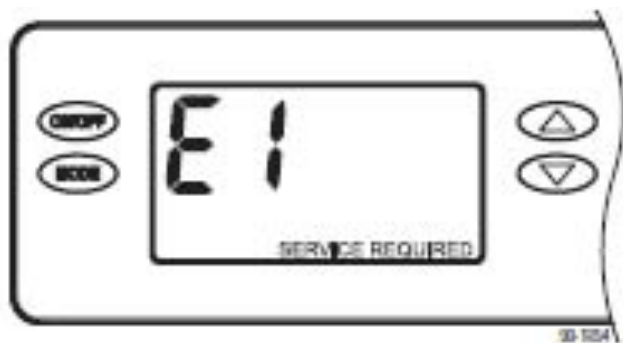


Fig. 11 – Diagnostic Codes

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