



Dri-CrawlSpace[®]
PLUS

Dri-CrawlSpace[®]
COMPACT

Dri-CrawlSpace[®] PLUS and Dri-CrawlSpace[®] COMPACT

Crawlspace Dehumidifier Installation and Operations Manual

Issued 06/05/2007

SAFETY NOTES

- ✓ The Dry-Crawlspace Dehumidifier must always be connected using the grounded electrical connection as required from all electrical appliances. The warranty is voided and all responsibility for the operation is born by the owner if non-grounded wiring is utilized.
- ✓ The Dry-Crawlspace Dehumidifiers must only be maintained and serviced by a qualified technician.
- ✓ The Dry-Crawlspace Dehumidifiers are intended only for operation when oriented with the unit sitting on its feet and level. Any other orientation could cause water to come in contact with the electrical components. Remove plug before moving dehumidifier. If any water may have spread throughout unit, the unit should be opened and allowed to dry thoroughly before reconnected to electric and restarting.
- ✓ For proper operation, neither the inlet nor discharge should be positioned against a wall. The inlet requires a minimum of 12" clearance and the discharge needs a minimum of 24" clearance.
- ✓ For proper diffusion of air throughout the room, the dehumidifier should be positioned with the sides against a wall and the inlet and discharge perpendicular to the wall.
- ✓ Do not insert any objects into the inlet or discharge. If service is required, call a qualified technician. All work on unit should be down with the unit "off" and unplugged.
- ✓ Do not use water to clean unit exterior. Only use a damp cloth with unit unplugged.
- ✓ Do not use unit as shelf or device to hang clothes. This could cause damage to unit.
- ✓ The inlet filter generally needs to be cleaned once per month. Check unit on a weekly basis to insure that more frequent cleaning is not required.

INTRODUCTION

Designed for a wide range of applications, the **Dri-CrawlSpace® COMPACT** and **Dri-CrawlSpace® PLUS** dehumidifiers are commercial and industrial grade units which utilize an energy efficient, high capacity compressor in order to provide efficient drying of a room or area.

The fan draws the moist air through the cold evaporator coil, which cools the air below its dew point. Moisture forms on the evaporator coil and is collected in the condensate tray, which is equipped with a permanent drain. The cooled air then passes through the hot condenser coil where it is reheated using the same energy removed during the cooling phase, plus the additional heat generated by the compressor. The air is, therefore, discharged from the dehumidifier at a slightly higher temperature with a lower absolute humidity than that which entered. Continuous circulation of air through the dehumidifier gradually reduces the relative humidity within the area.

The **Dri-CrawlSpace® COMPACT** and **PLUS** are reliable drying units designed to operate effectively over a broad range of temperature and humidity conditions. An active refrigerant defrost system, controlled by a sensor monitoring the coils, guarantees positive de-icing, thereby optimizing operation at low temperatures.

The units incorporate a welded and galvanized steel chassis and are finished in an epoxy coating for resistance to damage caused by rough handling and inclement environments.

These Models Have A Number Of Special Features:

- ❖ Compact Size
- ❖ High Efficiency Rotary Compressor
- ❖ Refrigerant Defrost System
- ❖ Epoxy Powder-Coated Exterior Finish
- ❖ Provision For Permanent Drainage
- ❖ Galvanized Metal Interior
- ❖ Extra Long Power Cord
- ❖ Adjustable Feet For Level Instalation
- ❖ Internally Mounted Humidistat

SPECIFICATIONS

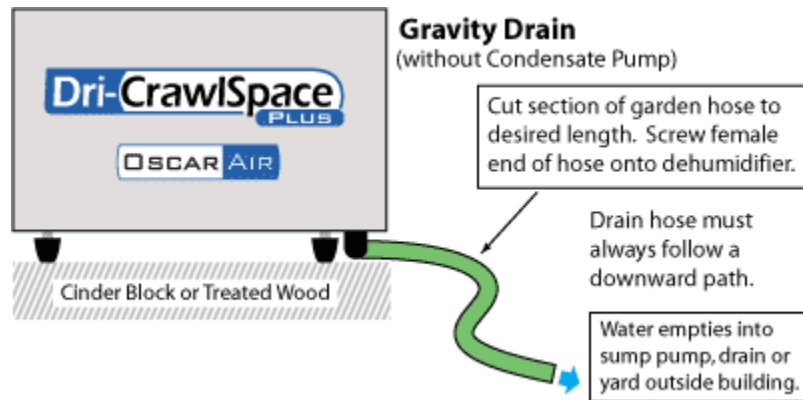
Model	Dri-CrawlSpace® Compact	Dri-CrawlSpace® Plus
Height	16"	16"
Width	13.8"	13.8"
Length	23"	23"
Weight	60.00 lbs.	62.00 lbs.
Airflow	200 cfm	350 cfm
Extraction @80 F / 60% Rh	30 pints per day	50 pints per day
Power Supply	115 volt / 60 hertz single phase	115 volt/ 60 hertz single phase
Finish	Powder-coated epoxy	Powder-coated epoxy
Operating Range	33 f to 90 f	33 f to 90 f
Refrigerant	R-410a	R-410a
Condensate Drain Size	3/4" male threaded	3/4" male threaded
Amps (Full Load)	3.5 fla	4.2 fla
Power Cord	20' grounded plug	20' grounded plug
Filter Size	11" x 11"	11" x 11"

INSTALLATION

The area to be controlled should be sealed with a vapor barrier. If installed in a crawlspace, all vents should be sealed.

- ❑ Place dehumidifier on level surface
- ❑ If necessary, the legs have some adjustment to help level the unit.

Install with Condensate Pump as shown below:
(For details on condensate pump installation, refer to manual included with pump.)

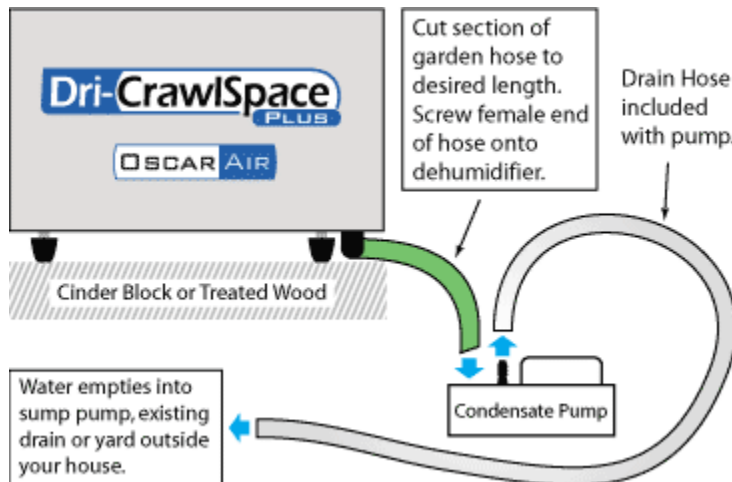


CAUTION:

Once unit is positioned, wait a minimum of 5 minutes before turning unit “on.” If unit is running and you must turn “off” for any reason, wait a minimum of 5 minutes before restarting to allow refrigerant to balance.

WARNING:

If after unit is positioned, it is moved in such a manner that the compressor didn’t remain in a vertical orientation, wait a minimum of 2 hours before turning the unit “on.”



- ❑ Route drain line (3/4” ID tubing) to drain or outside of the area. Drain line must have a downward slope to drain or condensate pump.
- ❑ Plug unit into 15 amp grounded outlet.
- ❑ To operate unit, turn humidistat knob clockwise until unit energizes.
 - Confirm compressor is running and allow to run for minimum of 15 minutes
 - If under 80°F, a layer of ice will form on evaporator coil
 - If over 80°F, a layer of frost or water droplets will form on coil
- ❑ After you’ve confirmed satisfactory operation of unit, humidistat should be set at desired position for automatic operation.

Position of Dehumidistat Knob	1	2	3	4	5
Desired Relative Humidity	70%	60%	48%	35%	25%

- In "OFF" the machine will never start
- In "CONT" (continuous) the machine will never stop

NOTE:

Humidistat settings are approximate only. For critical applications, you may want to confirm actual settings with a psychrometer and adjust according.

OPERATION

During normal operation, the dehumidifier will automatically cycle "on" and "off" to maintain your desired set point. If it should need to run for extended periods of time, the dehumidifier features an automatic defrost cycle to melt any ice that accumulates on evaporator coil. Approximately every 35 minutes of continuous operation, the unit will test for the need for defrost cycle. If required, it will defrost for approximately 3 minutes.

WARNING:

Never apply an external source of heat to melt ice off coil.

Maintenance:

Annual Inspection of Coils and drain line is required.

1. Unplug Unit
2. Filter may be cleaned by
 - a. Vacuuming
 - b. Washing with warm, soapy water. Rinse and shake dry.
3. Coils may be cleaned by
 - a. Vacuuming the external surfaces of coil
 - b. Blowing compressed air from behind coils. Hold air nozzle 6" away from coil to avoid damage.

WARNING:

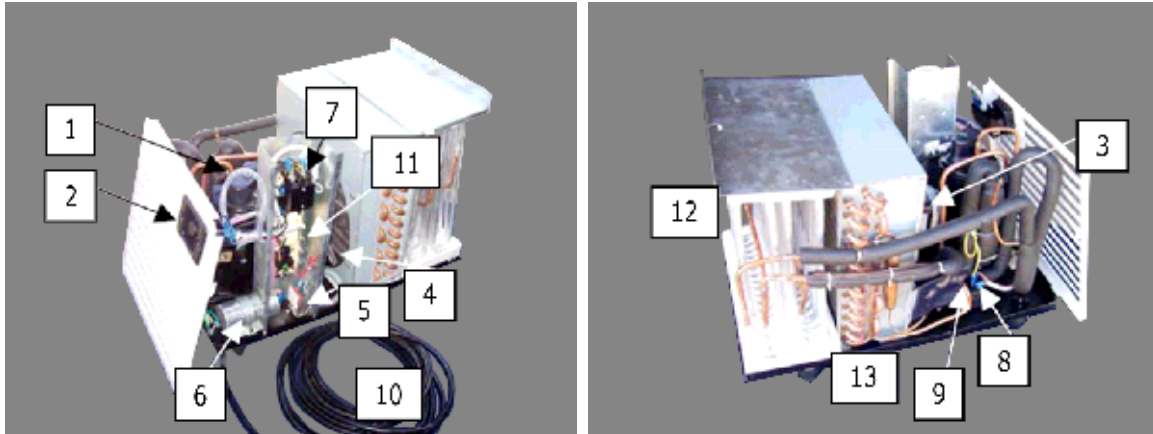
Do not steam clean refrigerant coils.

4. Plug in Unit
5. Test Refrigerant Charge
 - a. Confirm compressor is running and allow to run for minimum of 15 minutes
 - i. If under 80°F, a layer of ice will form on evaporator coils
 - ii. If over 80°F, a layer of frost or water droplets will form on coil
6. Test Defrost System
 - a. Leave unit running for approximately 35 minutes (45-55 minutes). The unit should enter a defrost mode for approximately 3 minutes. The unit will run fan only for a period of time and then check the temperature of the coil. If necessary, the unit will enter a defrost mode with the compressor operating and fan off to defrost the coil. If the unit will not defrost, either
 - i. Control board may be defective
 - ii. Bypass valve may be defective
7. After routine maintenance has been completed, return humidistat to desired setting.

IF ANY PROBLEMS OCCUR IN THIS ROUTINE MAINTENANCE, CONTACT THE FACTORY FOR AN AUTHORIZED SERVICE CENTER.

WARNING: ENSURE THAT THE POWER CORD TO THE UNIT HAS BEEN DISCONNECTED BEFORE PERFORMING MAINTENANCE ON THE UNIT.

PARTS



Item	Compact Part #	Plus Part #	Description
1	DH-30-101	DH-50-101	Compressor
2	DH-101	DH-101	Humidistat
3	DH-30-102	DH-50-102	Fan Motor
4	DH-30-103	DH-50-103	Fan Blade
5	DH-102	DH-102	Thermostat
6	DH-30-104	DH-50-104	Capacitor
7	DH-103	DH-103	Relay
8	DH-104	DH-104	Solenoid Coil
9	DH-105	DH-105	Solenoid Valve
10	DH-106	DH-106	Power Cord
11	DH-107	DH-107	Control Board
12	DH-30-105	DH-50-105	Condenser Coil
13	DH-30-106	DH-50-106	Evaporator Coil

LIMITED WARRANTY

Manufacturer warrants the equipment to be free from defects in workmanship and material for a period of 12 months after shipment (36 months on compressor). This warranty is limited, however, to the repair or replacement of defective equipment, which is returned, freight prepaid, to the factory.

This limited warranty does not apply to any part or component that is damaged in transit or when handling, has been subject to misuse, has not been installed, operated or serviced according to the instructions manual, or has been operated beyond the factory-rated capacity or has been altered in any way. Routine maintenance is not covered by this warranty.

Seller's liability is limited to replacement of defective parts or components and does not include any cost of labor (including, but not limited to, labor to remove and/or reinstall any defective part).

The manufacturer, OscarAir, Inc. and its affiliates shall not be responsible for loss of use of any product, loss of time, inconvenience, or damage to other equipment, or any other indirect or consequential damage with respect to property whether as a result of breach of warranty, neglect, or otherwise.

THE WARRANTIES AND LIABILITIES SET FORTH ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE.

The foregoing shall constitute the total liability of seller in the case of defective performance of all or any of the equipment or services provided to Buyer. Buyer agrees to accept and hereby accepts the foregoing as the sole and exclusive remedy for any breach or alleged breach of warranty by Seller.

Complete and Save for Your Records:

Model: _____

Serial Number: _____

Date Installed: _____