



Dry Air
TECHNOLOGY

OWNER'S MANUAL



ATLANTIC LGR LOW GRAIN REFRIGERANT DEHUMIDIFIER

**This manual contains important safety and operating information.
Please read before using the dehumidifier and save for future reference.**

Purchase Date: _____ Serial No: _____

313 North Oak Street Burlington, Washington 98233 Toll Free: 888.755.9176

Phone: 360.755.9176 • Fax: 360.755.9236 • email: info@dryairtech.com • www.dryairtech.com



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*******IMPORTANT*******

READ FIRST BEFORE OPERATING UNIT

BEFORE OPERATING:

IMPORTANT! The power switch must be in the “OFF” position before it is plugged in. The error light will illuminate if the switch is in the “ON” position before it is plugged in the wall because the safety circuit has not been initialized.

The standard operating temperature for the Atlantic LGR is 58 °F degrees to 120 °F. The unit will freeze below 58 °F. Units stored in cold areas could cause the coils to frost, and when plugged in, the unit may immediately go into defrost mode (indicated by the blue light on the control panel). This is normal. To prevent a leak, properly place the discharge hose into a receptacle before the unit goes into automatic pump out mode.

AFTER OPERATING:

Please keep in mind that coils may still be cold at the end of each use. Keep the unit plugged in and the discharge hose in a receptacle. Allow the unit to thaw thoroughly until the side of the unit is no longer cold to touch. Press the purge switch to completely empty the pump reservoir. If the condensate pump is not properly purged after the last use, or if the unit is removed from the job site before the coils return to room temperature, the condensate pump may begin to pump water immediately when the unit is plugged in at the next job site causing a leak if the discharge hose is not placed in a receptacle.

Please be sure that unit goes through defrost mode completely to ensure that the evaporator coil is properly thawed, and that collected water in the pump is fully purged. Unplugging the unit before the evaporator coil is fully defrosted could cause water to collect in the pump and overflow causing a leak.

Congratulations on your purchase of the Atlantic LGR dehumidifier. Please carefully read the operation and maintenance instructions prior to operating the unit. Following these instructions will ensure proper operation, transportation and storage of the Atlantic LGR. This will maximize the performance and minimize occurrences of misuse that may result in unnecessary service and repairs and shorten the operating life of the unit.

SAFETY INFORMATION

Caution!

Unit operates on alternating current:

110/120 volt, 60 Hz

Or 230 volt, 50 Hz

Do not operate your Atlantic LGR Dehumidifier with a cut or frayed power cord. Do not unplug your dehumidifier by pulling on its cord. Grasp the plug firmly and pull it out of the wall socket. The plug has a safety ground pin installed that must not be removed. If the pin is damaged or missing, have the power cord replaced at once. Visually inspect the power cord before each use. Ignoring these safety precautions may result in a fire or an electric shock.

Never operate electrical equipment in standing water. There is a shock hazard.

Never drop the unit. Sudden and severe impact may result in damage to internal components.

Your Atlantic LGR Dehumidifier should not be operated with the unit's outer cover removed. Personal injury may result.

Drapes or other loose fabrics can be drawn against the unit restricting its airflow. This condition may cause the unit to overheat. Assure that there is sufficient space between the back of the unit and these fabrics to avoid this condition.

Save the shipping carton in case your Atlantic LGR Dehumidifier must be returned for repair. Discard the plastic bag to prevent children from using it as a toy. Also, children should not be allowed to play on or near a running dehumidifier.

Never operate your Atlantic LGR Dehumidifier outside when it is raining and never store your dehumidifier outside.

This unit should never be serviced or cleaned while it is plugged into a live electrical power source.

Warning!

Ignoring these safety precautions may result in serious personal injury.

OPERATION

Inspection of unit: Upon delivery of your Atlantic LGR dehumidifier, inspect the packaging for signs of damage. If you suspect any concealed damage, it is critical that the damage be identified and noted before you sign for the delivery. If this procedure is followed the shipping claim is between the freight company and the company that hired the freight company to deliver your unit. After the delivery receipt is signed, the claim must be filed by your company within 7 days.

Transportation of unit: The Atlantic LGR dehumidifier MUST be transported in the vertical, operating position. The unit may be placed in a horizontal position on its back for loading and unloading purposes only. Transporting the unit in this position puts undue stress on the refrigeration components and tubing and can also cause significant damage to these parts. If the unit has been in a horizontal position prior to use, place the unit upright and wait for 60 minutes before starting the unit.

Electrical requirements: The Atlantic LGR dehumidifier will plug into a grounded 15 amp outlet. If used in wet conditions a ground fault interrupter (GFI) outlet or attachment is required for safe operation. The unit draws 7.5 amps at 80 °F, 60 %RH (AHAM conditions). When operated at higher humidity and temperatures the amp draw will increase. When operated at cooler or drier conditions the amp draw will decrease.

Set-up for operation: To set-up the unit for operation, place the unit in an upright position normally located in the center of the area to be dehumidified. Connect the 40' drain hose to the drain hose lead located at the bottom of the control panel. Run the drain hose to a permanent drain or water tight container. Plug the power cord into the dehumidifier and then into a grounded 15 amp outlet.

Before turning the unit on, check that the pleated media air filter is in place and in proper operating condition. If ducting is going to be attached to the Atlantic LGR, this should be performed prior to turning the unit on.

To turn the unit on, push the power switch. The power lamp on the control panel (green) will lighten. The fan will immediately come on, and the compressor will start. The low pressure control may turn off the compressor if starting the unit when it has been stored in cold conditions. This is caused by the contraction of the cold refrigerant. The low pressure control prevents the compressor from operating when there is insufficient refrigerant in the system. Insufficient refrigerant will cause damage to the compressor. A false low charge may be sensed by the control if the refrigerant is cold. The automatic restart will switch the unit back on if the pressure in the system increases. In extremely cold conditions this may cycle a few times.

Be sure to properly purge remaining water in the pump after each use. Please keep in mind that coils may still be cold at the end of each use. Allow the unit to adjust to room temperature and press the purge switch. If the condensate pump had not been properly purged after the last use, or if the unit had been removed from the previous job site before the coils had returned to room temperature, the condensate pump may begin to pump water immediately when the unit is plugged in.

Control Panel

The control panel (picture below) contains the power switch, hour meter, function lamps, pump purge switch, power cord connection, and drain hose lead. All of these components are identified in the picture.

The **Hour meter** displays the number of hours of operation since the unit was built to the tenth of an hour (six minutes).

The **Power lamp (green)** lights when the power switch is on.

The **Pump lamp (yellow)** lights when the condensate pump is engaged. This will occur when the auto pump switch is activated by the water level in the condensate pump reservoir or when the pump purge switch is pressed.

The **Defrost lamp (blue)** lights when the unit enters a defrost cycle. The light will go off when the defrost cycle is completed.

The **Error lamp (red)** will light if the condensate pump safety switch is activated by a failure of the auto pump function. This safety switch will also turn off the compressor, so the pump will not overflow. The Error lamp will also light if the low pressure switch senses low pressure in the refrigeration system and has turned off the compressor. This lamp indicates a need for service.

Control Panel



Dehumidifier is used in a dusty environment, cleaning may need to be accomplished more frequently. The coils should be dry before the following cleaning operation is performed.

Dry Method. Inject compressed air through each coil. After removing the dry particle contamination, a wet cleaning process may be used.

Caution!

Do not use a hose to flush the coils and do not permit water to leak into the electrical compartment.

Wet method. Use a soft brush and soapy water. If soils have been allowed to accumulate over time, they may be dry and hard. Soak time may be required to dissolve and release these soils from the coils. A spray bottle or a syringe can be used to apply controlled amounts of cleaning solution. After cleaning, make sure that the drain port, the condensate tray and drain tubing are free of any residual soil.

MAINTENANCE

Warning!

Disconnect the unit from the power supply before cleaning or servicing.

Filter Cleaning: The pleated air filter must be checked regularly. The filter itself should be vacuumed frequently to control the build-up of soil. A dirty filter will reduce the dehumidifier's capacity and efficiency. **Do not wash the filter.** Replace the filter when it has been used on a mold remediation job and when it shows signs or normal wear and tear.

Coil Cleaning: As the coils accumulate soil, their heat transferring properties are reduced. This can diminish water extraction and create undue pressure on the refrigeration system.

The coils should be cleaned about every 8 to 12 weeks. If the Atlantic LGR

Electrical Wiring & Cord: Inspect the power cord periodically to make sure that the insulation is in good condition. Replace worn or damaged cords.

Remove the dehumidifier cover to expose the wiring and components. Inspect wires to assure that they are secured away from the fan blade. Repair or replace as needed.

Fan Motor: Carefully remove dust and debris from the fan motor and blade assembly whenever you remove the unit's cover for interior cleaning.

Drain Hose: Inspect the gravity drain hose to make sure it is in good condition. The hose should be checked before your Atlantic LGR Dehumidifier leaves the shop and again before the unit is left on the job.

Make sure that the drain hose is **not** kinked or cracked. Avoid leaving the drain hose in a folded position during transport and storage.

Drip Tray: Inspect the drip tray. Clean when dirt and debris are present. Dirt and debris could clog the funnel preventing water from draining.

Automatic Pump and Compressor: Pump and compressor should be inspected annually.

FEATURES

Rapid Hot Gas Defrost: Swiftly melts ice formation on the cooling coil and returns the unit to dehumidification mode. This occurs in a fraction of the time compared to a simple fan-defrost system that can sacrifice more than 25% of dehumidification operation time.

Compact Design: The overall width of the unit is four inches (16%) narrower than competitive units. This is achieved by the inset wheels, which makes it more maneuverable, especially through narrow entryways and staircases.

Removable Heat Exchanger: Allows for quick, easy cleaning and maintenance which allows access to the cooling coil surfaces.

Rugged ABS Skid Panel: Panel makes loading and unloading simple and protects the unit from scratches and abrasions.

Control Panel: The control panel plus the power and drain hose connections are nested into the back panel for added protection and convenience. It features an hour meter, light indicators to let you know if the unit is on, in defrost mode, if pump is engaged or if there is an error.

Hinged Top: Unlike competitive units, the hinged top prevents loss or misplacement of the cover. The detachable power cord and drain hose

store easily inside the hinged top thus eliminating dangling cords and hoses.

SPECIFICATIONS

Height:	41.1"
Width:	20.4"
Depth:	22.0"
Weight:	142 LBS
AHAM	140 pints
(80°F, 60%)	(17.5 gallons)
Airflow:	330 CFM
Compressor:	9,165 BTU
Power Supply:	110V
Amperage:	7.4 amps
Refrigerant:	R - 22

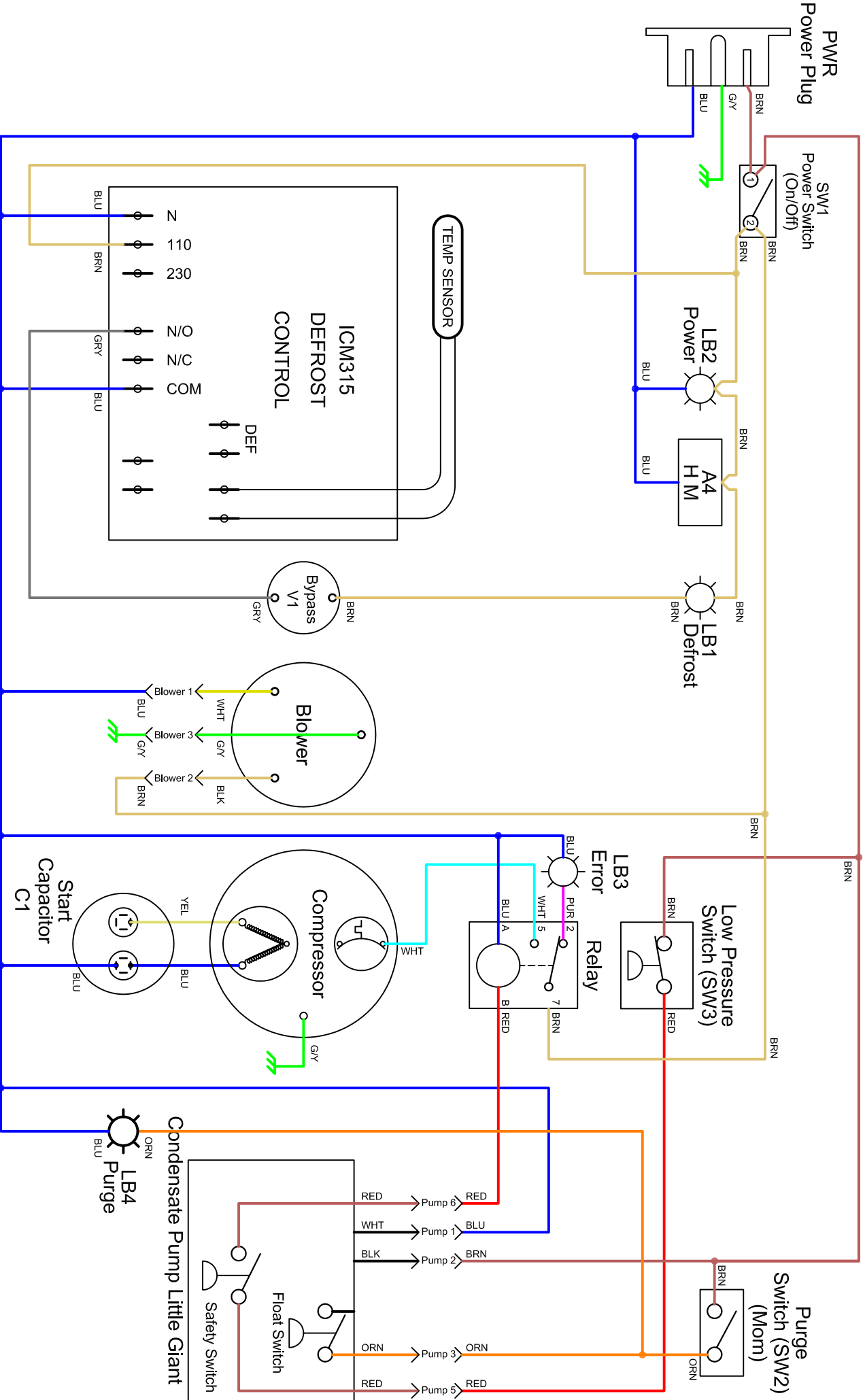
REPAIRS

1. Should an electrical component fail consult your Distributor or the Factory Service Center to obtain OEM parts.
2. If a problem develops in the refrigeration system, only a certified refrigeration technician can correct it. Contact your Distributor or the Factory Service Center for more information.
3. For technical support and general information, contact your Distributor or the Factory Service Center.

Atlantic LGR™ PARTS LIST

Description	Part Number
Stainless Steel Removable Front Cover	RD-00C-S4AN0450
Stainless Steel Top Cover	RD-00C-S3AN0451
Rubber Foot	RD-00F-PNN10239
Air Filter MERV 8	RD-00C-N6NN0482
20' - Power Cord	RD-00E-P4A10249
On/Off Rocker Switch	GN-00E-P3B10218
Momentary Switch	GN-00E-P3B30217
9,165 BTU Compressor	RD-00M-M2A10268
Blower Motor	RD-00M-M1N10251
Capacitor 25mf 370 VOLT	RD-00E-NNHN0279
Relay 6-240 VAC 50/60 Hz	RD-00E-NNAN0255
Evaporator Coil	RD-02M-N2AN0246
Condensor Coil	RD-02M-N2AN0245
Condensate Pump	RD-00M-PNA10241
ICM Defrost Control	RD-00E-N6NN0236
ICM Defrost Control Mount	RD-00C-G8NN0407
Hour Meter	RD-00E-P5AN0099
3/8 Hose Fitting (Attached to 1 ft hose from pump to 40' Discharge hose)	RD-00M-P3A70231
1/4" 40' Discharge Hose	RD-00M-P5A90230
1/4 Barb Fitting (Attached to 40 ft hose)	RD-00M-P3A70232
12" Wheels	RD-00M-PNA10241
Bumper Wheels	RD-00M-PNN10255
Foot 1x1.49" 5/16-18 Bolt (used to attach bumper wheels)	RD-00F-PNN10239
Metal Heat Exchanger	RD-00M-A2BN0244

Atlantic 115V Schematic





RETURN AND REPAIR POLICY

RETURN AUTHORIZATION NUMBER (RMAs)

- Before a purchaser ships a product back to Dry Air Technology, the purchaser must obtain a valid RMA number by calling 1.888.755.9176. Boxes received without an authorized RMA number will be refused. When preparing the item for return please ensure that the RMA number is clearly visible on a label on the outer covering.
- Please have the following information ready when requesting an RMA number:
 1. Reason for return.
 2. Product (model) numbers and quantity to be returned.
 3. Serial numbers of each product.
 4. Customer name and return address.
 5. Company where product was purchased and when it was purchased.
 6. Copy of invoice and/or packing slip.

PACKAGING

Items must be returned in its original packaging. This includes the plastic sleeve the product came in, along with cardboard separators. Original packaging will help protect unit from freight damage upon return.

NON-RETURNABLE ITEMS

Items may not be returned to Dry Air Technology if items contain customer markings, stickers or damage.

The following conditions are NOT covered by our warranty and can be refused for credit or return:

1. Normal "wear and tear"
2. Improper packaging by customer causing freight damage.
3. Failure to provide a suitable operating environment
4. Use of the product for purposes other than those for which it was designed
5. Failure to monitor or operate the product in accordance with applicable seller specifications and good industry practice.
6. Unauthorized attachment, removal, or alteration of any part of the product
7. Unusual mechanical, physical, or electrical stress, scratches or dents
8. Modifications or repairs done by parties other than the seller
9. Abuse, misuse, neglect, or accidental damage

DAMAGED FREIGHT

Though it is a very rare occasion, shipping containers and/or their contents can be damaged during shipping. Open and inspect every package regardless of how the box looks. If the box is physically damaged and/or the parts are damaged, you must notate on the bill of lading that the box and/or the parts are damaged before you accept the shipment. DO NOT sign the bill of lading without notating the damage. Freight claims cannot be resolved without this notation from the recipient. If the box is fine and after opening and testing the unit you discover any internal damages call us immediately. In no case can we allow longer than 7 days to file a claim.

Dry Air Technology 10 Year Limited Warranty

Refrigerant Dehumidifier Products

Warrantor: Dry Air Technology, 313 North Oak Street, Burlington, WA 98233. Telephone: 888-755-9176, local: 360-755-9176, fax: 360-755-9236.

Who Is Covered: This warranty extends to the original end-user of refrigerant dehumidifiers manufactured by Dry Air Technology, and may not be assigned or transferred.

Warranty Period: The term of the warranty coverage from the date of purchase is:
10 years on the cabinet, chassis and housing
5 years on the parts of the sealed refrigeration system
1 year on parts, labor and reasonable shipping costs, excluding filters and accessories.

Warranty Coverage: Dry Air Technology warrants that, for one year refrigerant dehumidifiers manufactured by Dry Air Technology will operate free from defects in material or workmanship, or Dry Air Technology, at its option, will repair or replace the defective part(s), free of charge.

Dry Air Technology further warrants that for a period of five (5) years, the condenser, evaporator and compressor of dehumidifiers manufactured by Dry Air Technology will operate free from defects in material or workmanship, or Dry Air Technology, at its option, will repair or replace the defective part(s), provided that all labor and shipping costs for the defective part(s) shall be borne by the end-user.

Dry Air Technology further warrants that for a period of ten (10) years, the cabinet, chassis and housing of dehumidifiers manufactured by Dry Air Technology, will be free from defects in material or workmanship, or Dry Air Technology, at its option, will repair or replace the defective part(s), provided that all labor and shipping costs for the defective part(s) shall be borne by the end-user.

This warranty does not cover any defect, malfunction, etc. resulting from misuse, abuse, lack of normal care, corrosion from chemicals, freezing, tampering, modification, unauthorized or improper repair or operation, accident, acts of nature or any other cause beyond Dry Air Technology's reasonable control.

End-User Responsibilities: Warranty service must be performed by a firm or individual authorized by Dry Air Technology. If the end-user is unable to locate or obtain warranty service from an authorized firm or individual, he should contact Dry Air Technology at the above location, which will arrange for covered warranty service. All covered warranty service will be performed during normal business hours.

Limitations and Exclusions: If any part of a dehumidifier manufactured by Dry Air Technology is repaired or replaced, the new part shall be warranted only for the remainder of the original warranty period of the dehumidifier (but all warranties will be extended by the period of time, if any, that the Dry Air Technology dehumidifier is out of service while waiting for covered warranty service).

UPON THE EXPIRATION OF THE WRITTEN WARRANTY APPLICABLE TO THE DRY AIR TECHNOLOGY DEHUMIDIFIER OR ANY PART THEREOF, ALL OTHER WARRANTIES IMPLIED BY LAW, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL ALSO EXPIRE. ALL WARRANTIES MADE BY DRY AIR TECHNOLOGY ARE SET FORTH HEREIN, AND NO CLAIM MAY BE MADE AGAINST DRY AIR TECHNOLOGY BASED ON ANY ORAL WARRANTY. IN NO EVENT SHALL DRY AIR TECHNOLOGY, IN CONNECTION WITH THE SALE, OPERATION, REPAIR OR REPLACEMENT OF ANY DRY AIR TECHNOLOGY DEHUMIDIFIER OR PART THEREOF BE LIABLE UNDER ANY LEGAL THEORY FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION WATER DAMAGE (THE END-USER SHOULD TAKE PRECAUTIONS AGAINST SAME), LOST PROFITS, DELAY, OR LOSS OF USE OR DAMAGE TO ANY REAL OR PERSONAL PROPERTY.

Some states do not allow limitations on how long an implied warranty lasts, and some do not allow the exclusion or limitation of incidental or consequential damages, so one or both of these limitations may not apply to you.

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

DRY AIR TECHNOLOGY, BURLINGTON, WASHINGTON