

Owner's Manual —

Phoenix 1800 DX Desiccant Dehumidifier

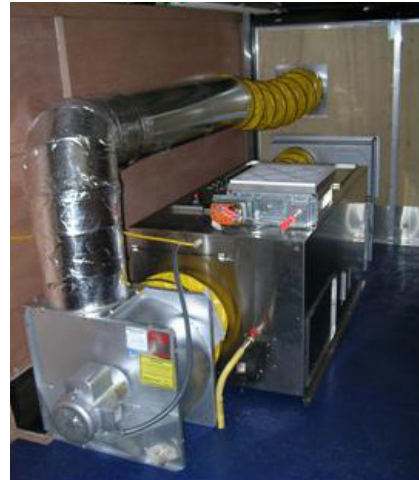
Installation, Operation & Service Instructions

Read and Save These Instructions

The Phoenix 1800DX is a complete mobile desiccant drying system. This powerful efficient desiccant has 1800 CFM of process air while drawing only 16 amps at 115 volts. The 1800DX is constructed of durable, stainless steel and uses an advanced silica gel rotor. The 1800DX has up to 6 days run time on only 100 gallons of propane, beating all other desiccants in its class.

The Phoenix 1800DX system includes a high performing, high efficiency desiccant dehumidifier, a 16ft. tandem axle V-nose trailer with electric brakes and a 120-gallon DOT approved propane cylinder.

The Phoenix 1800DX is the perfect first-responder to any drying emergency.



Phoenix 1800DX
Desiccant Dehumidifier
PN 4028001



FOR YOUR SAFETY: DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

⚠ WARNING
Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, call a qualified installer, service agency or the gas supplier.

FOR YOUR SAFETY: If you smell gas: **DO NOT** try to light any appliance. **DO NOT** touch any electrical switch. **IMMEDIATELY** call your gas supplier from a location away from the device. If the gas supplier cannot be reached, call the fire department.



1800 DX includes 16' tandem trailer
w/electric brakes

The Phoenix 1800 DX	
<ul style="list-style-type: none"> • Dual Axle, V-Nose Trailer • 115 volts @ 16 amps • 1800 CFM process airflow (3060 m³/hr) • 1000 pints/day @ AHAM (473 l/Day) • 420 lb DOT approved Propane Cylinder (190 kg) 	<ul style="list-style-type: none"> • Dries in temperatures to 140°F (60°C) • Corrosion Resistant Stainless Steel Construction • Reaches dew points as low as -40°F (-40°C)

Specifications subject to change without notice.

GENERAL HAZARD WARNING

Failure to comply with the precautions and instructions provided with this unit can result in death, serious bodily injury and property loss or damage from hazards of fire, explosion, burn, asphyxiation, carbon monoxide poisoning, and/or electrical shock.

Only persons who can understand and follow the instructions should use or service this unit.

If you need assistance or unit information such as an instruction manual, label, etc., contact a qualified installer, service agency, gas supplier, or the manufacturer.

WARNING

FIRE, BURN, INHALATION, AND EXPLOSION HAZARD.

Keep solid combustibles, such as building materials, paper, or cardboard, a safe distance away from the unit as recommended by the instructions. Never use the unit in spaces which do or may contain volatile or airborne combustibles, or products such as gasoline, solvents, paint thinner, dust particles or unknown chemicals.

WARNING

Do NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

Should overheating occur, or the gas supply fail to shut off, shut off the manual gas valve to the appliance before shutting off the electrical supply.

WARNING

Installation must conform to applicable local codes and/or the National Fuel Gas Code, ANSI Z223.1, the Standard for the *Storage and Handling of Liquefied Petroleum Gases*, ANSI/NFPA 58 and the *Natural Gas and Propane Installation Code*, CSA B149.1.

Other standards govern the use of fuel gases and heat producing products in specific applications. Your local authority can advise you about these.

MISES EN GARDE GENERALES

Le non-respect des mises en garde et des instructions fournies avec ce radiateur peut entraîner la mort, de graves blessures et des pertes matérielles ou des dommages à la propriété résultant d'un incendie, d'une explosion, de brûlures, d'asphyxie, d'empoisonnement au monoxyde, de carbone et/ou d'un choc électrique.

Seules les personnes aptes à comprendre et à suivre les instructions devraient se servir de ce radiateur ou le réparer.

Si vous avez besoin d'aide ou d'informations concernant ce radiateur ou le réparer.

Avertissement

Risque d'incendie, de brûlures, d'inhalation et d'explosion. Garder les combustibles solides, tels les matériaux de construction, le papier et le carton, à bonne distance de ce radiateur, comme il est recommandé dans les instructions. Ne jamais utiliser cet appareil dans des endroits qui contiennent ou pourraient contenir des combustibles volatiles ou en suspension dans l'air tels l'essence, les solvants, les diluants pour peinture, les particules de poussières ou des produits chimiques inconnus.

Table of Contents

Introduction1
 Warnings2
1. Specifications.....4
2. Operation4
 2.1 How the Phoenix 1800DX Works..... 4
3. Installation.....5
 3.1 Inspection5
 3.2 Location5
 3.3 Set-Up.....5
 3.4 Ducting.....5
 3.5 Avoiding Secondary damage.....5
 3.6 Electrical Requirements6
4. Operation Instructions.....6
 4.1 Start-Up Procedure6
 4.2 Cool Down7
 4.3 Shut Down and Disconnect Procedure.....7
5. Control Panel7
 5.1 Main Disconnect7
 5.2 Power Light7
 5.3 Selector Switch7
 5.4 Run Light.....7
 5.5 Alarm (Light and Horn).....7
6. Maintenance7
 6.1 General Maintenance7
 6.2 Cabinet7
 6.3 Filter7
 6.4 Blower and Motor8
 6.5 Drive Motor.....8
 6.6 Rotor Drive Belt.....8
 6.7 Seals8
 6.8 Desiccant Media8
 6.9 Fuel Cylinder8
7. Wiring Diagram9,10
8. Troubleshooting.....11
9. Service Parts List12
10. Warranty.....13

Serial No. _____

Purchase Date _____

Dealer's Name _____

Read the operation and maintenance instructions carefully before using this unit. Proper adherence to these instructions is essential to obtain maximum benefit from your Phoenix 1800DX.

1 Specifications

Part No.	4028001
Power	115 Volt, 16 amps 20 Amps minimum service required
BTU Input	60000 (17.6kW)
Water Removal	1000 pints/day @ AHAM (473 L/Day)
Blower	1800 CFM Process Air Flow (3060 m ³ /hr) 400 CFM Reactivation Air Flow (680 m ³ /hr)
Operating Range	-10°F to 140°F (-23°C to 60°C)
Filters	(2) 16" x 16" x 2" (406mm x 406mm x 51mm)
Duct Options	Process inlet 14" Flex-Duct (356mm) Process outlet 14" Flex-Duct/Lay Flat (356mm) Reactivation inlet NOT DUCTABLE Reactivation outlet NOT DUCTABLE
Trailer	7' x 16' Dual Axle (2.1m x 4.9m) V-nose Trailer (nominal) Rear Ramp Door Dual Side Access Doors
Propane Cylinder	Onboard 420 lb DOT (190kg) Approved LP Tank
Warranty	1 year 100% Parts & Labor
Dimensions	
Trailer Overall Height	96" (2438mm)
Trailer Overall Length	246" (6248mm)
Trailer Interior (not including V-nose)	163"L x 81"W x 75"H (4140mm x 2057mm x 1905mm)
Trailer GVWR	7700 lbs. (3490kg)
1800DX Dry Weight	3660 lbs. (1660kg)
Tire Size	205/75/R15
Hitch Size	2-5/16" (58.74mm)
Fuel Tank	420 lb. DOT approved cylinder (190kg) 100 gallon LP capacity (379L)

Accessories

4028029	16" x 16" x 2" Aluminum Process Air Filter (406mm x 406mm x 51mm)
4021799	16" x 16" x 2" Pleated Reactivation Air Filter (406mm x 406mm x 51mm)
4024936	14" x 250' Lay-flat Duct (356mm x 76.2m)
4028043	14" Flex-Duct (356mm)
4026305	Humiport 05 Thermo-Hygrometer
4026310	Humiport 10 Thermo-Hygrometer
4024995	Phoenix HMI-41

2 Operation

The function of the dehumidifier is to remove moisture (in the vapor state) from an air stream. This is accomplished by exposing the air to an adsorbing media (desiccant) in a sealed air stream (process). After the desiccant has adsorbed moisture, it is exposed to a second air stream at an elevated temperature (reactivation). This causes the moisture to be driven out of the desiccant preparing it for more moisture adsorption. This process is done on a continuous basis, providing a constant drying process. The two air streams (process and reactivation) are separated by seals, which contact the desiccant media. Figure 1 illustrates the relationship of the seals and airflow pattern. The dehumidifier is designed with the two air streams flowing in opposite directions (counter flow) thereby maximizing the energy efficiency of the equipment.

Principle of Operation

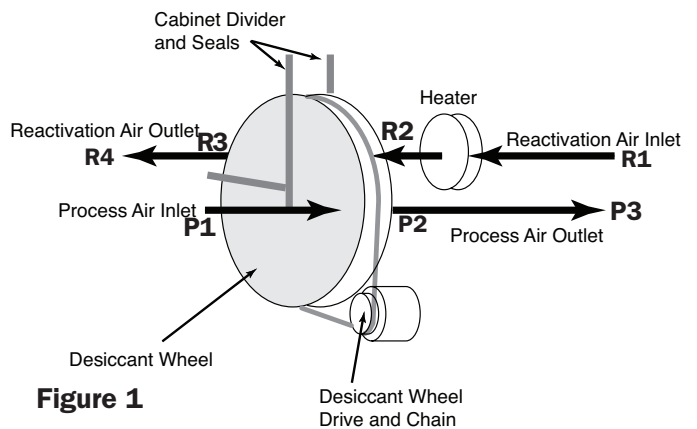


Figure 1

2.1 How the Phoenix 1800DX Works

The Phoenix 1800DX has two separate air streams that run through it – Process and Reactivation (Fig. 1).

Process Air Stream:

P1 – 1800 (3060 m³/hr) CFM of air enters the machine (Process Air Inlet) and...

P2 – ...water vapor from incoming air is deposited (adsorbed) on the desiccant wheel.

P3 – 1800 (3060 m³/hr) CFM of dry air exits the machine (Process Air Outlet).

Reactivation Air Stream:

R1 – 400 (680 m³/hr) CFM of air enters the machine (Reactivation Air Inlet) and...

R2 – passes over the heater burner.

R3 – Water vapor is picked up (desorbed) from the desiccant wheel by the hot air and...

R4 – ... 400 (680 m³/hr) CFM of wet air exits the machine (Reactivation Air Outlet).

3 Installation

Proper installation is critical to the performance of the Phoenix 1800DX. Follow the guidelines below to maximize service life and performance.

3.1 Inspection

Thoroughly inspect the machine to ensure no damage has occurred during transport or on the job site. Check for any obvious signs of deterioration of the 1800 device. Examine the base of the 1800 for signs of sagging, gaps, or cracks between the base and the trailer floor.

3.2 Location

Note the following precautions when locating the Phoenix 1800DX:

Trailer must be located outdoors with reactivation outlet pointed away from open windows or building fresh air inlets. Position trailer for shortest, straightest duct run to structure. Provisions for adequate combustion and ventilation air must be provided in accordance with section 5.3 of the National Fuel Gas Code ANSI Z223.1.

Always ensure the 1800DX is located with the reactivation outlet pointed such that the reactivation air exhausts to the atmosphere in an unoccupied area and can NOT be drawn into any nearby structure. Do not exhaust reactivation air across walkways or towards buildings, openable windows, or building openings. Do not allow the reactivation outlet to become obstructed by snow, construction debris, etc. Maintain a minimum 4' clearance around electric and gas meters, regulators, and relief equipment. Locate device a minimum of 10' from combustible constructions. Be aware that reactivation air contains flue gasses that, over time, can degrade some building materials. Do not connect device to a chimney flue serving a separate appliance designed to burn solid fuel.

Do not direct process or reactivation air streams toward any Propane-gas container within 20' (6m).

3.3 Set-Up

When conditions warrant the use of a desiccant dehumidifier, use one of the setups described below to achieve efficient drying, while avoiding secondary damage. Review Section 2.1 to understand the desiccant drying process. Always ensure the 1800DX is located with the reactivation outlet pointed such that reactivation air will NOT be drawn back into the structure.

Neutral Pressure Setup

Many drying applications require neutral pressure operation. In this setup, the Process Air Inlet pulls air from the affected area (drying chamber) and returns dried, processed air to the affected area via the Process Air Outlet.

Positive Pressure Setup

For Positive Pressure operation, the Process Air Inlet pulls

air from outside the drying chamber, while the Process Air Outlet is ducted into the chamber.

3.4 Ducting

To get maximum performance out of the 1800DX desiccant dehumidifier, **ALL SUPPLY AND RETURN AIR DUCTING MUST BE AIR AND VAPOR TIGHT.** This is extremely important for proper performance. Ensure that reactivation discharge air does not enter the process or reactivation inlets. Be sure that the return air duct connection(s) is physically sound, is sealed to the appliance casing, and terminates outside of the trailer.

Using excess duct length significantly reduces air flow volume through duct. This is true in any application. If the job at hand needs a short length of duct, cut a section to the appropriate length. If air flow is restricted by excess length, performance will suffer. The same can be said of excess bends in the ducting.

All ducting materials are available from Therma-Stor LLC (see accessories list in Section 1).

Process inlet: 14" flex duct. (356mm)

To attach flexible ducts to the process air inlet, push the duct wire past the metal flange on the 1800DX duct collar. Secure with hose clamps or ratcheting straps. If only using one inlet connection, seal second connection.

Process outlet: 14" flex or lay flat plastic duct. (356mm)

To attach flexible ducts to the process air outlet, push the duct wire past the metal flange on the 1800DX duct collar. Secure with hose clamps or ratcheting straps.

When using 14" (356mm) lay flat ducting, slip over the outlet collar and zip-tie or duct tape in place.

3.5 Avoiding Secondary Damage

The Phoenix 1800DX is a powerful tool capable of removing a great deal of water from most environments. Care must be taken to avoid secondary damage of over-drying and or unexpected condensation.

The Phoenix 1800DX removes vapor water from the incoming process air stream and transfers it to the outgoing reactivation air stream. The reactivation exhaust air is hot and wet.

Take care to prevent the reactivation exhaust air stream from causing secondary damage due to condensation. Always ensure the 1800DX is located with the reactivation outlet pointed such that reactivation air will NOT be drawn back into the structure.

The Phoenix 1800DX does not produce liquid water internal to the machine. There is no condensate pump and no drain hose.

The 1800DX desiccant dehumidifier will continue to remove water from already dry, cold air. It is possible to over-dry objects and or structures.

Care must be taken to avoid secondary damage due to over-drying.

3.6 Electrical Requirements

A dedicated and properly grounded 115VAC outlet with 20A branch protection is required for correct operation. Be sure no other devices are running, or could start on the same circuit as the 1800DX device.

All local and state codes must be strictly adhered to and good electrical practices should be followed to achieve the best installation possible.

In the absence of local codes, refer to National Electric Code, ANSI/NFPA 70 if an external electrical source is utilized.

(See *Electrical Schematic* drawing in the back of this manual for internal wiring.)

4 Operating Instructions

The Phoenix 1800DX dehumidifier comes complete and ready for operation.

Note: Do not place any items over reactivation air filter inside trailer. Adequate clearance must be provided for proper combustion airflow.

4.1 Start-Up Procedure

- 1) Verify main disconnect and selector switch are both in the OFF position.
- 2) Plug in power cord.
- 3) Open gas valves (one on tank in V-nose and one inside trailer near 1800 device).
- 4) Switch on main disconnect.
- 5) Turn selector switch to ON.
- 6) Once both blowers have started, burner will light (this could take 2 to 3 minutes).
- 7) Observe flame through window. Blue flame should be steady and in contact with burner element.

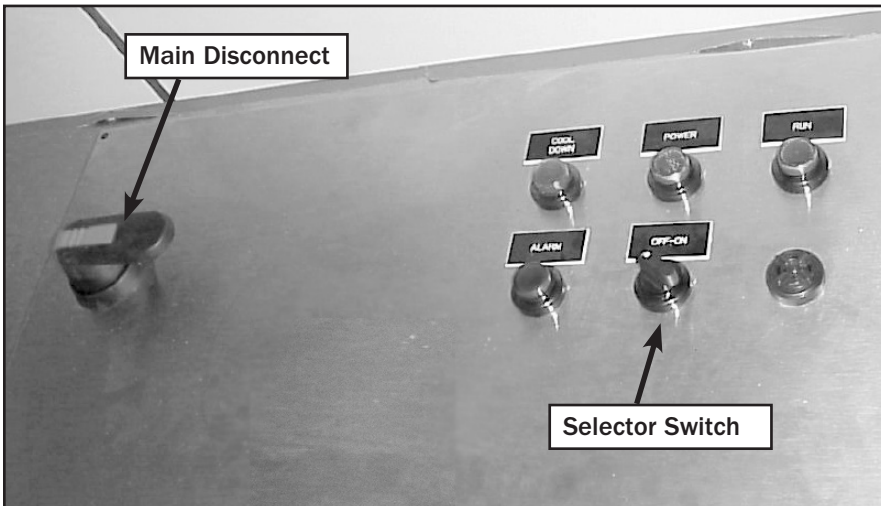


Figure 2

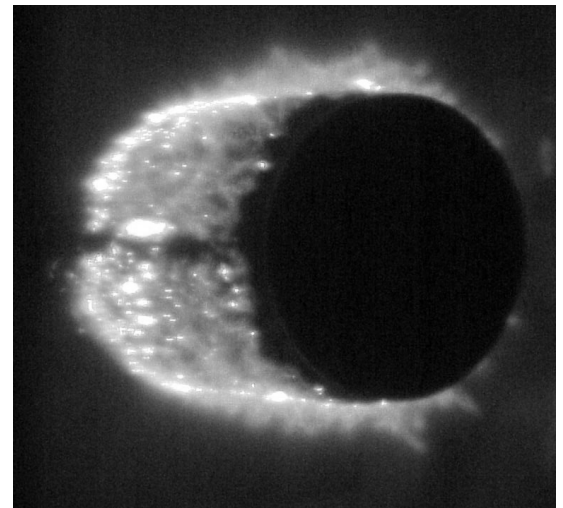


Figure 4

Flame should be blue in color and cling to the surface of the fiber element within $\frac{1}{2}$ " to $\frac{3}{4}$ ".

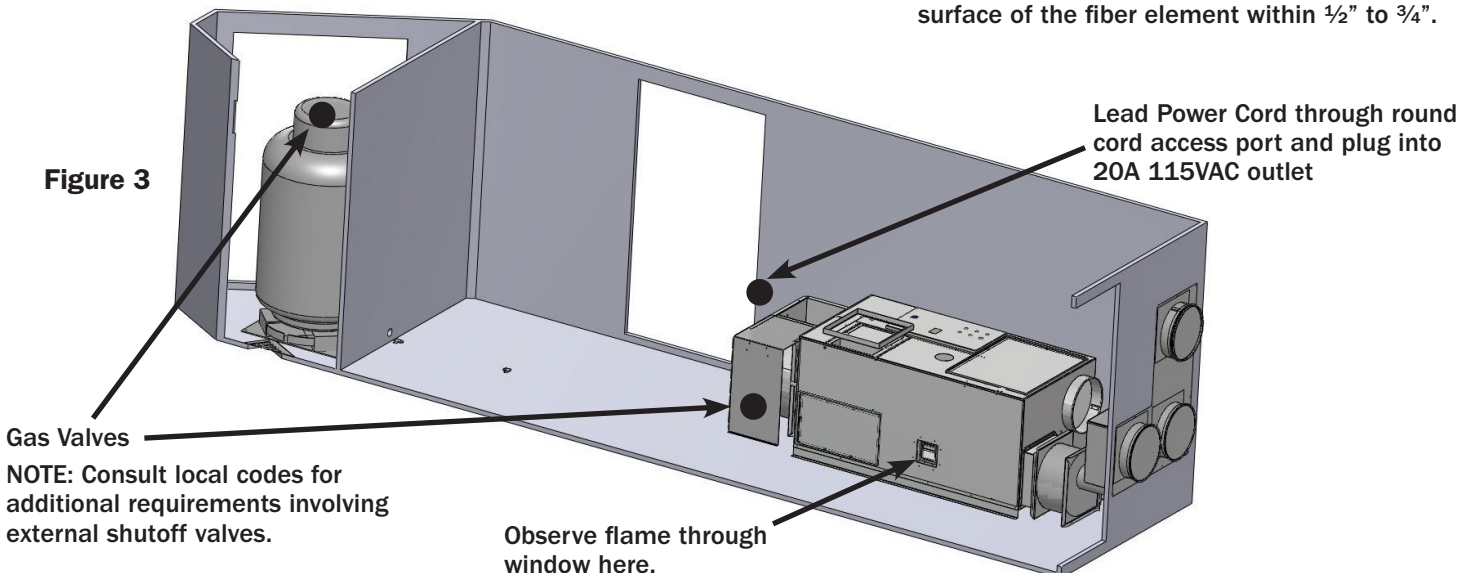


Figure 3

4.2 Cool Down Procedure

WARNING

Failure to follow **COOL DOWN PROCEDURE** may result in damage to unit due to overheating. **ALWAYS** follow **COOL DOWN PROCEDURE** before shutting unit down.

- 1) Set Selector switch to OFF and wait for COOL DOWN light to come on.
- 2) Process blower and burner should be OFF.
- 3) WAIT for COOL DOWN LIGHT to go OFF (5 minutes).

4.3 Shut Down & Disconnect Procedure

- 1) Verify COOL DOWN LIGHT is not illuminated and Cool Down Procedure has been followed.
- 2) Close gas valves. (valve on LP tank and valve inside trailer)
- 3) Turn Main Disconnect switch to OFF.
- 4) Unplug power cord.

Note: Be sure the gas is turned off at the propane supply cylinder when the 1800DX is not in use.

5 Control Panel

5.1 Main Disconnect

The Main Disconnect switches power from the source to the panel. Power must be disconnected at the source prior to accessing control panel. Access to the control panel with power applied is **ONLY** by qualified service personnel.

WARNING

Power is present up to disconnect even in OFF position. Disconnect power at the source before opening panel.

5.2 Power Light

The POWER indicator lamp illuminates to indicate that power is supplied to the control panel.

5.3 OFF-ON Selector Switch

When the Selector Switch is moved to the ON position, the reactivation blower and burner are started and the 1800DX begins dehumidification. The 1800DX will continue to dehumidify in all conditions until the power is turned off. No dehumidistat is provided to monitor process inlet air condition (see over-dry warning section 3.5). An external control (dehumidistat, thermostat, or other contact) can be wired in place of the jumper across terminals 55 and 56. The external control must be a dry contact switch designed to operate a 115VAC circuit.

5.4 Run Light

The Run light will illuminate when the OFF-ON Selector switch is in the ON position. This light indicates the unit is dehumidifying. The Run light will go out if an external control is being used and there is no demand.

5.5 Alarm (Light and Horn)

The alarm indicator lamp illuminates (and horn sounds) to indicate that a fault condition exists. The fault conditions could be:

- Motor overload
- Reactivation temperature greater than 375°F (190°C) (possibly due to low reactivation airflow)
- No dehumidification (i.e. saturated wheel)

An external alarm can be wired to terminals 52 and 58. This will provide 115VAC during an alarm condition.

6 Maintenance

6.1 General Maintenance

A definitive time schedule should be established for inspecting all rotating parts and components. Inspection requirements depend on the frequency of operation, transport, and operating conditions. Periodically check the condition of the air filter, rotating parts, and fasteners to ensure they are secure and in proper working order. Periodically check airflow to make sure there are no obstructions to airflow in outlet or inlet ductwork.

Recommended minimum inspections:

- Upon installation
- After 1 week of operation.
- Annually thereafter or upon loss of performance to include combustion system and be performed by a qualified servicer.

Note: The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 1/2 PSIG (2.5 KPA).

6.2 Cabinet

CAUTION

Disconnect power before removing access panels.

Remove panel fasteners and panels from unit to access internal components. The condition of the cabinet gaskets should be observed during inspection and servicing to insure a good seal. Any leaks must be sealed and panels securely fastened for proper dehumidifier operation.

Burner compartment may be cleaned by removing burner access panel and using compressed air to loosen contaminants. Follow up by vacuuming loose debris.

6.3 Filter

The maintenance interval for the filter depends directly on the cleanliness of the air entering the dehumidifier. It is suggested that a program be established to assure that the filters are replaced or cleaned prior to becoming clogged to the point they create a system problem.

Two air filters (16"x16"x2") (406mm x 406mm x 51mm) must be checked regularly. One filter is located at the

process air inlet. The other one is located at the reactivation air inlet.

Wash aluminum filters with fresh water. Clean the filter from the downstream side, forcing debris toward the filter inlet. Dry the filter completely before installing it in unit. Replacement filters can be ordered from the factory or purchased locally if available.

DO NOT operate the unit without the filters or with less effective filters as the desiccant wheel inside the unit will become clogged and require disassembly to clean.

6.4 Blower and Motor

Blower and motor bearings are permanently lubricated and do not require maintenance. Blower wheel - inspect wheel blades for accumulation of dust and dirt. Clean thoroughly with compressed air and or vacuum. The wheel should not strike the housing or the inlet ring. Make sure wheel is rotating in the proper direction.

6.5 Drive Motor

The media drive motor is permanently lubricated and requires no maintenance.

6.6 Rotor Drive Belt

A spring loaded tensioner keeps the belt sufficiently tensioned. Check the belt for signs of excessive wear. Replace as necessary.

6.7 Seals

High temperature seals separate the process and reactivation compartments. Normally, the seals will not require service or replacement. However, should damage occur, or if poor performance as the result of an air leak is suspected, the following inspection must be performed to determine whether the seals should be replaced:

Inspection:

- 1) Turn the unit off and remove the access covers.
- 2) Visually inspect for gaps between the desiccant media and the seals.
- 3) If significant gaps, wear, or damage are observed, the seal needs to be replaced.

6.8 Desiccant Media

The silica gel desiccant media supplied with the dehumidifier will last indefinitely under normal conditions. Due to the nature of desiccants they make very good filters. The life of the desiccant is directly related to the airborne contaminants passed through it. Atmospheric contaminants, exposure to acidic gases/or air streams,

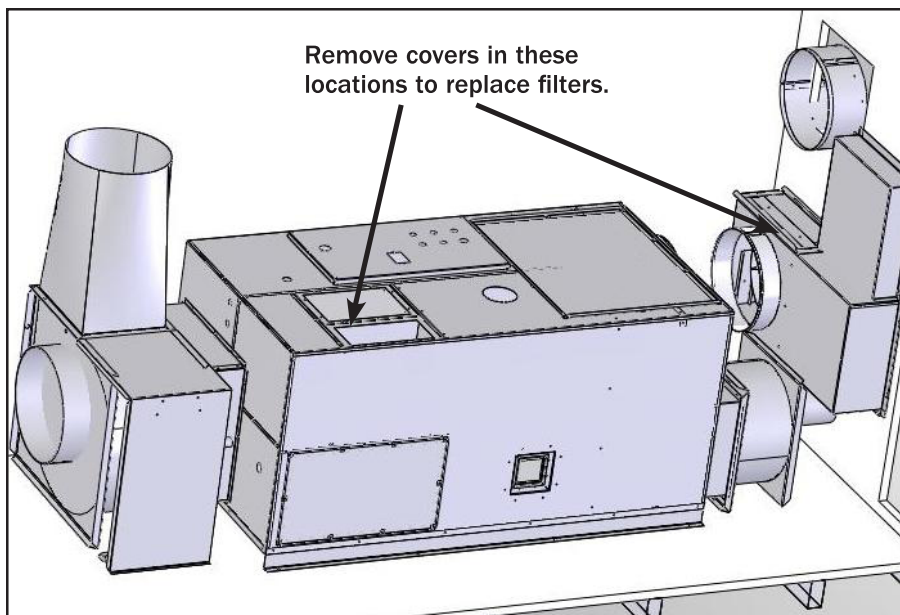


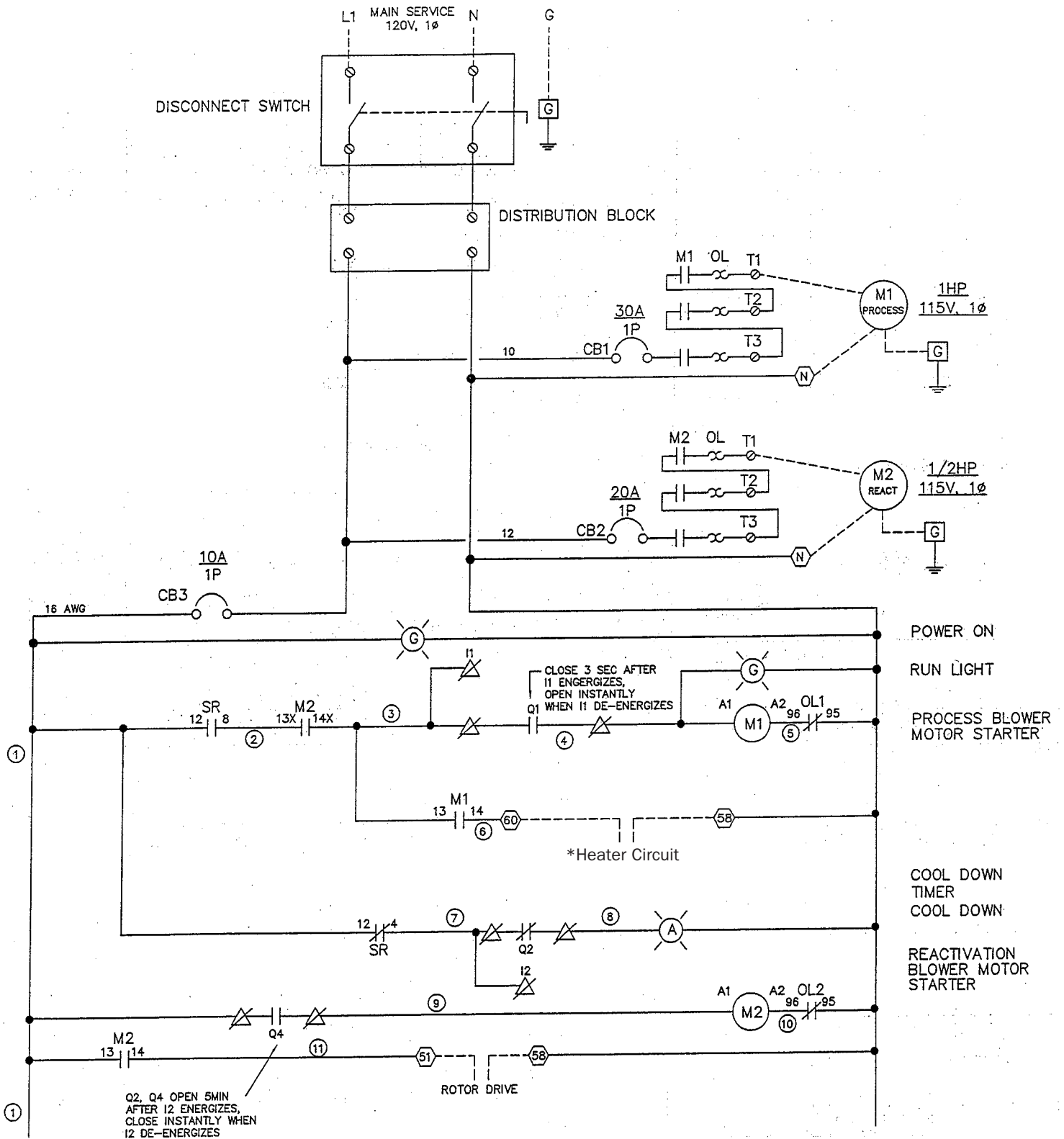
Figure 5

and contact with petroleum based airborne particles can reduce the efficiency of the desiccant media. The preferred method of cleaning is to blow dust out with compressed air. Proper filtration and preventing contact with chemicals will greatly improve the life of the desiccant. Inspect the face of the media to see that no surface damage has occurred. If damage is noticed, please contact Therma-Stor at 1-800-533-7533 for assistance. The rotor should turn smoothly upon the shaft, if not check the support bearings.

6.9 Fuel Cylinder

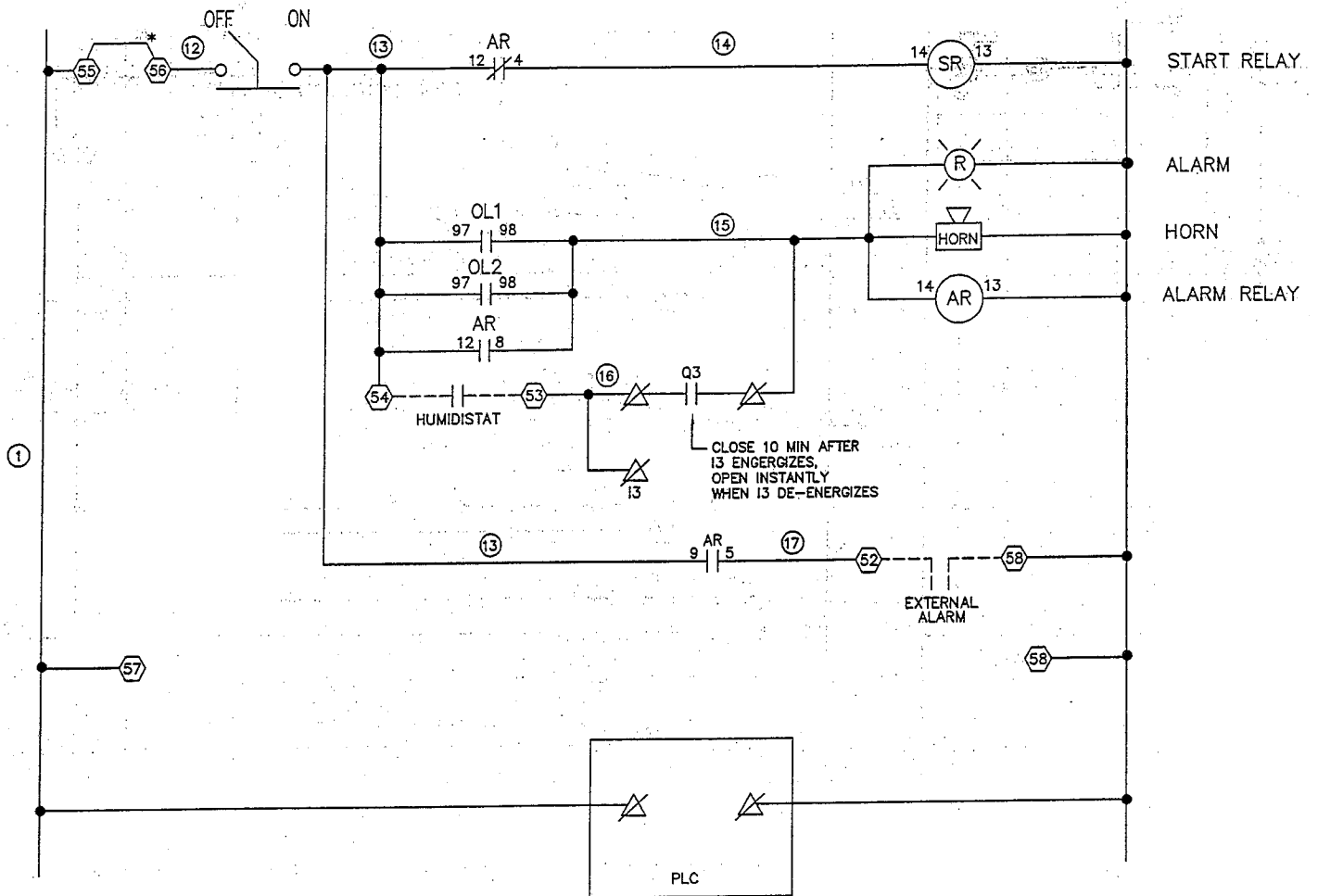
To remove LP cylinder for inspection, recertification, or replacement, first disconnect the copper pigtail between the cylinder and the pressure regulator. The tank is held in place by rods through the lifting eyes and bolts through the floor and frame. Note that cylinder is arranged to provide vapor withdrawal only. After reconnecting the cylinder, perform a leak check by opening the tank valve and probing the joints between the tank and regulator with a flammable gas detection device or spray joints with a leak detecting fluid (soap/water solution) and watch for any bubbles to form. Fix any leaks before operating device.

7 Panel Layout/Wiring Diagram



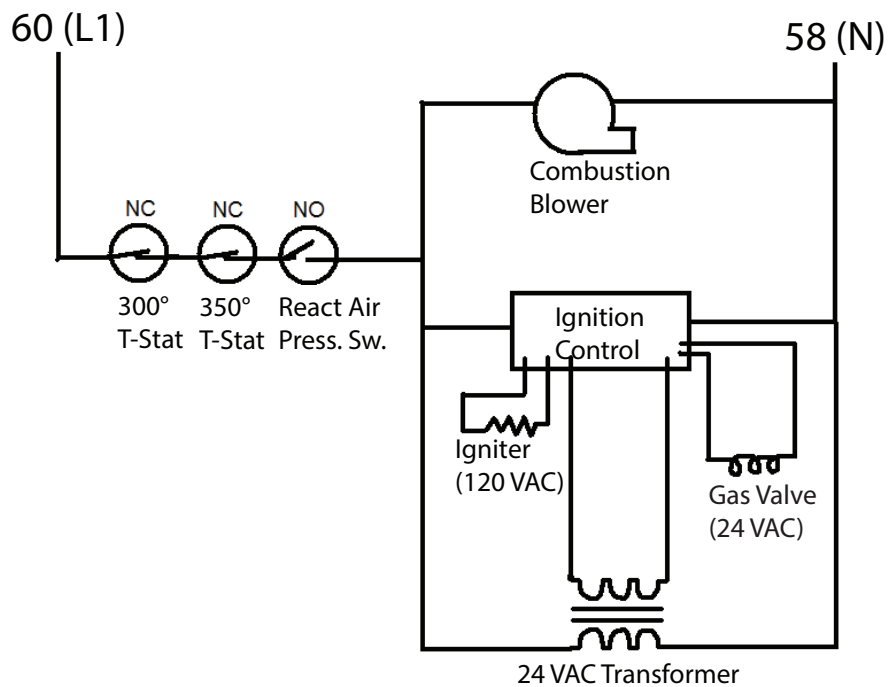
*See diagram on page 8

7 Panel Layout/Wiring Diagram



*Remove jumper & install Remote Start Contact if desired.

Heater Circuit



8 Troubleshooting



ELECTRICAL SHOCK HAZARD: Electrical power must be present to perform some tests; these tests should be performed only by a qualified service person.

Trouble	Probable Fault	Probable Cause	Corrective Action
Unit Stopped (fan off, no heater)	Power/Control Failure	<ol style="list-style-type: none"> 1. Main power off 2. Main disconnect open 3. Selector switch open 4. Dehumidistat 	<p>Check main power and cable</p> <p>Close or replace disconnect</p> <p>Close or replace switch</p> <p>Repair or replace</p>
Fan off (Rotor turns)	Power/Mechanical Failure	<ol style="list-style-type: none"> 1. Motor circuit breaker or overload tripped 2. Contactor failure 3. Motor winding failure 4. Fan motor failure 	<p>Reset circuit breaker or overload</p> <p>Repair or replace</p> <p>Repair or replace</p> <p>Repair or replace</p>
Unit running but humidity rises	Excessive infiltration of humid air into the controlled area	<ol style="list-style-type: none"> 1. Excessive unconditioned make-up air 2. Leaking ducts or air handling equipment outside controlled area 3. Access opening to area not sealed 4. Area not vapor tight 	<p>Reduce make-up air</p> <p>Seal leaks</p> <p>Close and seal</p> <p>Seal with paint or vapor barrier</p>
	Faulty humidity controls	<ol style="list-style-type: none"> 1. Dehumidistat needs adjustment 2. Improper settings 3. Defective 	<p>Re-adjust</p> <p>Re-adjust</p> <p>Replace</p>
	Inadequate air flow	<ol style="list-style-type: none"> 1. Dirty filter 2. Obstruction at inlet, outlet or ducting 3. Clogged desiccant media (high pressure differential across media) 	<p>Clean or replace</p> <p>Remove obstruction</p> <p>Remove and replace media rotor</p>
	Inadequate or no reactivation heat	<ol style="list-style-type: none"> 1. No Fuel 2. No power to ignition module 3. Overtemp switch failure 4. Igniter failure 5. Gas Valve Failure 6. Ignition control failure 	<p>Check for fuel in tank, verify valves open</p> <p>Watch for igniter glow through inspection window, verify power to transformer and ignition module</p> <p>Check continuity of overtemp switches</p> <p>If ignition module has power, watch for igniter glow through inspection window</p> <p>With gas valves OFF, power on the device and check for voltage at the gas valve</p> <p>Check power to ignition module, replace if igniter outputs are never energized and LED never blinks (allow several minutes to verify)</p>
	Air seals and gaskets	<ol style="list-style-type: none"> 1. Air leaking into dehumidifier 2. Air bypassing media or leaking seals 	<p>Replace access door gaskets</p> <p>Check media position, replace seals</p>
	Ineffective desiccant media	<ol style="list-style-type: none"> 1. Chain 2. Motor/gear box 3. Damaged desiccant rotor 4. Contaminated or damaged desiccant 	<p>Repair or replace</p> <p>Repair or replace</p> <p>Repair or replace</p> <p>Replace desiccant rotor</p>

9 Service Parts

Part No.	Description
4028008	Process Blower
4028009	Reactivation Blower
4028010	Magnehelic Gauge
4020175	Humidity Control
4026866	250-300F Thermostat (121°C to 150°C)
4030171	350F Thermostat
4029768	Gas Valve
4028015	Ignition Module
4028016	Hot Surface Igniter
4028018	Burner Element
4029769	Combustion Blower
4028029	Aluminum Washable Air Filter 16X16X2 (406mm x 406mm x 51mm)
4028033	Inspection Window Glass 6X6 (152mm x 152mm)
4028559	Inspection Window Glass 4X4 (100mm x 100mm)
4028043	14" Flexible Duct 25' long (356mm x 76.2m)
4028048	Desiccant Wheel Motor
4027307	24VAC Transformer
4028994	14" Duct Cover (356mm)
4026835	14" Duct Cover Clamp (356mm)

Phoenix 1800 DX Desiccant Dehumidifier Limited Warranty

Warrantor:

Therma-Stor LLC
4201 Lien Rd.
Madison, WI 53704
Telephone: 1-800-533-7533

Who Is Covered: This warranty extends only to the original end-user of the 1800 DX Desiccant Dehumidifier and may not be assigned or transferred.

First Year Warranty: Therma-Stor Products warrants that, for one (1) year the 1800 DX will operate free from any defects in materials and workmanship, or Therma-Stor Products will, at its option, repair or replace the defective part(s), free of any charge.

End-User Responsibilities: Warranty service must be performed by a Servicer authorized by Therma-Stor Products. If the end-user is unable to locate or obtain warranty service from an authorized Servicer, he should call Therma-Stor Products at the above number and ask for the Therma-Stor Products Service Department, which will then arrange for covered warranty service. Warranty service will be performed during normal working hours.

The end-user must present proof of purchase (lease) upon request, by use of the warranty card or other reasonable and reliable means. The end-user is responsible for normal care. This warranty does not cover any defect, malfunction, etc. resulting from misuse, abuse, lack of normal care, corrosion, freezing, tampering, modification, unauthorized or improper repair or installation, accident, acts of nature or any other cause beyond Therma-Stor Products' reasonable control.

Limitations and Exclusions: If any 1800 DX part is repaired or replaced, the new part shall be warranted for only the remainder of the original warranty period applicable thereto (but all warranty periods will be extended by the period of time, if any, that the 1800 DX is out of service while awaiting covered warranty service).

UPON THE EXPIRATION OF THE WRITTEN WARRANTY APPLICABLE TO THE 1800 DX 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 THERMA-STOR PRODUCTS ARE SET FORTH HEREIN, AND NO CLAIM MAY BE MADE AGAINST THERMA-STOR PRODUCTS BASED ON ANY ORAL WARRANTY. IN NO EVENT SHALL THERMA-STOR PRODUCTS, IN CONNECTION WITH THE SALE, INSTALLATION, USE, REPAIR OR REPLACEMENT OF ANY 1800 DX 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.

