

# P1500W2 Series Air Dryers



## User's Guide

Models covered:

P1500W2   P1500W2LP   P1500W2HP   P1502W2   P1502W2LP   P1502W2HP





## **1. Welcome & Congratulations**

Congratulations on your purchase of a new PUREGAS P1500W2 Series Air Dryer! We here at PUREGAS are very proud of our products and we are committed to providing you with the best value and service possible.

We are sure that you will be satisfied with your new air dryer and would like to thank you for choosing PUREGAS for your air dryer requirements. We also hope that you will continue to choose us for your future air pressure and related product purchases.

For information about this and other PUREGAS products, please visit us on the web at:

**[www.puregas.com](http://www.puregas.com)**

## **2. Introduction**

**PLEASE READ THIS USER'S GUIDE THOROUGHLY AND SAVE FOR FUTURE REFERENCE.**

This User's Guide is provided for the benefit of our customers and contains information and direction specific to the PUREGAS P1500W2 Series Air Dryers. Models covered include P1500W2, P1500W2LP, P1502W2 and P1502W2LP. This guide covers topics including: safety, specifications, installation, registration, operation, testing, maintenance, replacement parts, service, and troubleshooting issues. Observation and compliance with this User's Guide will ensure the maximum life and efficiency of your air dryer.

This User's Guide should be read thoroughly prior to installing, operating, or servicing the air dryer in order to become familiar with the recommended procedures. This will minimize the possibility of personal injury or damage to the unit due to improper operation or handling.

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## 4. Safety & Warning Information

This section contains general information about safety and warning points to consider and adhere to during installation, operation, and maintenance of your air dryer. PLEASE READ THIS SECTION BEFORE PERFORMING ANY OPERATION OR PROCEDURE ON YOUR AIR DRYER.

Additional warnings specific to an operation or procedure will also be presented throughout the following sections. These will include the ⚠ symbol as well as a label of “**WARNING!**”, “**CAUTION!**”, or “**IMPORTANT!**” Please be sure to pay close attention for these warnings and read them as you encounter them.



### **WARNING!**

For your safety, all the information in this User's Guide must be followed to minimize the risk of electrical shock, and prevent property damage or personal injury.



### **WARNING!**

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation, operation, testing, and maintenance of this air dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



### **WARNING!**

Internal surfaces may be hot. Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



### **WARNING!**

High Noise. PUREGAS air dryers are meant to be installed in an unattended area.

**CAUTION!**

Proper Installation & Maintenance as outlined in this User's Guide is extremely important to ensure the reliability and longevity of the equipment as well as prevent damage or personal injury.

**CAUTION!**

Depressurizing the air dryer may be necessary before performing certain procedures. **NEVER** remove pressure sensing tubes from the Control Board without depressurizing the air dryer first, or **damage to the Control Board will occur.**

**CAUTION!**

Incoming power to dryer must be:

- 15 amp service recommended
- 10 amp slow blow fuse
- 110 - 125 VAC, 50/60 Hz for P1500W2, P1500W2LP & P1500W2HP models
- 208 - 230 VAC, 50/60 Hz, 1 Phase for P1502W2, P1502W2LP & P1502W2HP models

**IMPORTANT!**

Performing routine maintenance as outlined in the *Maintaining Your Dryer* section will ensure optimal performance over the lifecycle of your air dryer.

**IMPORTANT!**

Performing procedures not described in this User's Guide or installing components not supplied by PUREGAS is **NOT RECOMMENDED AND MAY VOID THE WARRANTY.**

**CAUTION!**

This Air Dryer does not contain an internal Surge Protection Device (SPD). If an SPD is required it must be supplied by the user.

**CAUTION!**

Observe precautions for handling **Electrostatic Sensitive Devices**.

**IMPORTANT!**

Installation of PUREGAS air dryers are intended for network telecommunication facilities (non-customer premises) only.



## 5. Overview & Specifications

### 5.1 Product Description

The P1500W2 Series Air Dryers from PUREGAS are designed to intake wet ambient air and remove the moisture for delivery to applications requiring a constant, on-demand source of dry, pressurized air. This process is fully automatic and will remain consistent with minimal required periodic maintenance. These dryers are designed specifically for indoor use.

The P1500W2 Series Air Dryers employ a fully digital operating platform offering the most accurate readings of dryer variables, removable access panel allowing easier access for adjustment and maintenance, and ultra-quiet Compressor with an industry leading maintenance interval of 8,000 hours.

### 5.2 Key Features

- LCD display of all operating parameters
- Solid state microprocessor-based circuitry eliminates costly maintenance
- Accurate humidity sensing within  $\pm 0.1\%$  RH
- Quietest dryer on the market - less than 50 dBA
- Oil-less Compressors with 8,000 hour maintenance interval

### 5.3 P1500W2 Series Air Dryer Models

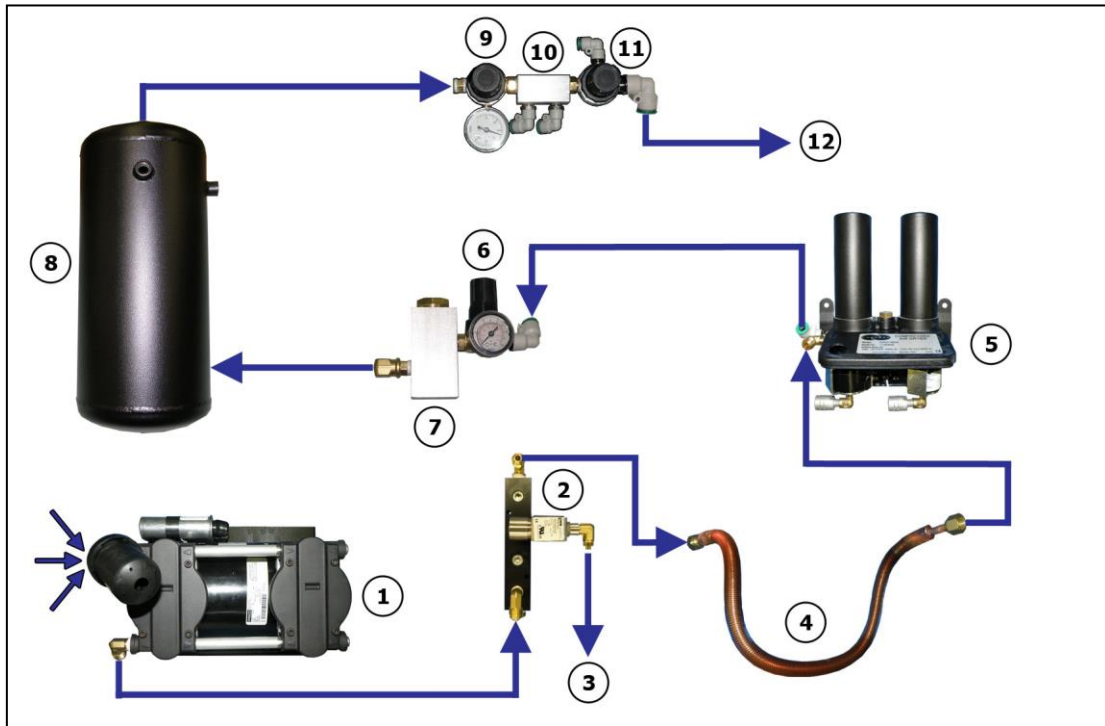
| Model     | Description                                       |
|-----------|---|
| P1500W2   | 110 - 125 VAC, Standard Pressure 13.8 – 103.4 kPa |
| P1500W2LP | 110 - 125 VAC, Low Pressure 2.07 – 51.71 kPa      |
| P1500W2HP | 110 - 125 VAC, High Pressure 13.8 – 414.0 kPa     |
| P1502W2   | 208 - 230 VAC, Standard Pressure 13.8 – 103.4 kPa |
| P1502W2LP | 208 - 230 VAC, Low Pressure 2.07 – 51.71 kPa      |
| P1502W2HP | 208 - 230 VAC, High Pressure 13.8 – 414.0 kPa     |

## 5.4 Technical Specifications

|                                    | P1500W2   | P1500W2LP           | P1500W2LP           | P1502W2                                       | P1502W2LP           | P1502W2LP           |
|------------------------------------|---|---------------------|---------------------|---|---------------------|---------------------|
| <b>Output Capacity*</b>            | Normal: Up to 34 SCMD continuous *<br>Maximum: 42.5 SCMD emergency *  |                     |                     |   |                     |                     |
| <b>Power Requirements</b>          | 110 - 125 VAC,<br>50/60 Hz, 7.0 Amps  |                     |                     | 208 – 230 VAC, 1 Phase,<br>50/60 Hz, 3.5 Amps |                     |                     |
| <b>Outlet Pressure Range</b>       | 13.8 – 103.4<br>kPa   | 2.07 – 51.71<br>kPa | 13.8 – 414.0<br>kPa | 13.8 – 103.4<br>kPa                           | 2.07 – 51.71<br>kPa | 13.8 – 414.0<br>kPa |
| <b>Outlet Air Humidity</b>         | Less than 2% RH   |                     |                     |   |                     |                     |
| <b>Compressor Type</b>             | Two-cylinder, 3/4 HP, oil-less type   |                     |                     |   |                     |                     |
| <b>Drying Method</b>               | Heatless Desiccant  |                     |                     |   |                     |                     |
| <b>Operating Temperature Range</b> | 5° to 30° C (optimal)   |                     |                     |   |                     |                     |
| <b>Noise Level</b>                 | 48 dBA at 3 m   |                     |                     |   |                     |                     |
| <b>Alarms</b>                      | Standard alarms – complete readings of all critical measurement points, individual alarm indication display |                     |                     |   |                     |                     |
| <b>Outlet Connections</b>          | 3/8" O.D. tube fitting  |                     |                     |   |                     |                     |
| <b>Dimensions</b>                  | 30.5 cm x 43.8 cm x 68.6 cm   |                     |                     |   |                     |                     |
| <b>Net Weight</b>                  | 33.6 kgs  |                     |                     |   |                     |                     |

\* **NOTE:** The Flow measurement will display \*\*\*\*\* for flows over 28.3 SCMD for the **P1500W2HP & P1502W2HP** models.

## 5.5 Dryer Function Overview



|    | Component                 | Description   |
|----|---------------------------|---|
| 1  | Compressor                | Compresses drawn in ambient air.  |
| 2  | Unloader Valve            | Relieves excess Compressor head pressure.   |
| 3  | Unloader Valve Exhaust    | Exhausts the air from the Unloader Valve.   |
| 4  | In-Line Cooler            | Cools compressed air prior to drying function.  |
| 5  | Heatless Dryer            | Removes moisture from compressed air.   |
| 6  | Capacity Control Valve    | Regulates System Pressure and prevents air from bleeding back through the Heatless Dryer.   |
| 7  | Humidity Sensor           | Measures the Humidity of the compressed air.  |
| 8  | Air Tank                  | Stores dry compressed air.  |
| 9  | Static Pressure Regulator | Regulates the Static Pressure (117 kPa for W2 & W2LP, 414.0 kPa for W2HP). Maintains constant pressure on the Flow Block for accurate Flow measuring. |
| 10 | Flow Block                | Measures the Flow Rate of compressed air.   |
| 11 | Outlet Pressure Regulator | Regulates the Outlet Pressure.  |
| 12 | Pressure Outlet           | Outputs the pressure set by the Outlet Pressure Regulator.  |

## 6. Installing Your Dryer

### 6.1 Safety & Warning Information



#### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** Many procedures performed during installation, operation, testing, and maintenance of this air dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



#### **WARNING!**

**Internal surfaces may be hot.** Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



#### **CAUTION!**

Proper Installation & Maintenance as outlined in this User's Guide is extremely important to ensure the reliability and longevity of the equipment as well as prevent damage or personal injury.



#### **CAUTION!**

Incoming power to dryer must be:

- 15 amp service recommended
- 10 amp slow blow fuse
- 110 - 125 VAC, 50/60 Hz for P1500W2, P1500W2LP & P1500W2HP models
- 208 - 230 VAC, 50/60 Hz, 1 Phase for P1502W2, P1502W2LP & P1502W2HP models

**WARNING!**

**High Noise.** PUREGAS air dryers are meant to be installed in an unattended area.

**IMPORTANT!**

Performing procedures not described in this User's Guide or installing components not supplied by PUREGAS is **NOT RECOMMENDED AND MAY VOID THE WARRANTY.**

## 6.2 Before You Begin

**6.2.1** Carefully inspect the unit, including the shipping box as well as the air dryer, for **ANY DAMAGE CAUSED BY SHIPPING**. If any shipping damage is detected, it is important to file a claim with the shipping company prior to continuing the installation procedures.

**6.2.2** Read the entire *Installing Your Dryer* section to familiarize yourself with the components and procedures before performing the air dryer installation.

**6.2.3** Verify the installation location of the air dryer:

**6.2.3.1** Well ventilated and free from abrasive dust or chemicals.

**6.2.3.2** Ambient temperature is between 5° and 30° C (optimal).

**NOTE:** Higher temperatures will decrease component lifespan.

**6.2.3.3** Meets the following power requirements:

- 15 amp service recommended
- 10 amp slow blow fuse
- 110 - 125 VAC, 50/60 Hz for P1500W2, P1500W2LP & P1500W2HP models
- 208 - 230 VAC, 50/60 Hz, 1 Phase for P1502W2, P1502W2LP & P1502W2HP models

**6.2.4** Notify the alarm center of the installation and potential for alarms during the process (as necessary).

### 6.3 Included Contents



(1) P1500W2 Series Air Dryer

(1) Installation Guide (not shown)

Package located inside the dryer:

(1) 120 VAC Power Cord (for P1500W2, P1500W2LP & P1500W2HP models)

(1) 220 VAC Power Cord (for P1502W2, P1502W2LP & P1502W2HP models)

(1) Precision Bleed Orifice Fitting

(1) User's Guide (not shown)

### 6.4 Required Tools and Materials

- 9/16" wrench
- Cup of soapy water
- 1-inch paint brush (recommended)
- Box cutter

## 6.5 Installation Steps

- 6.5.1** Using a box cutter remove the Dryer from box and all shipping materials.

**NOTE:** If ANY SHIPPING DAMAGE is detected, file a claim with the shipping company prior to continuing the installation procedures.

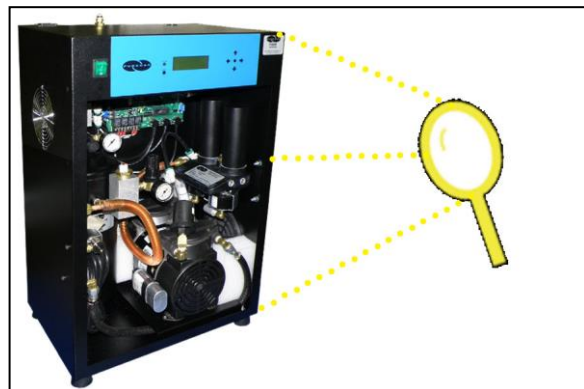


- 6.5.2** Open Front Panel latches and remove the Front Panel.

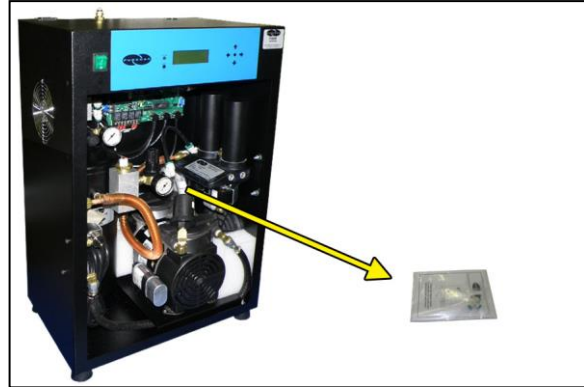


- 6.5.3** Check for loose parts, hoses, or wiring.

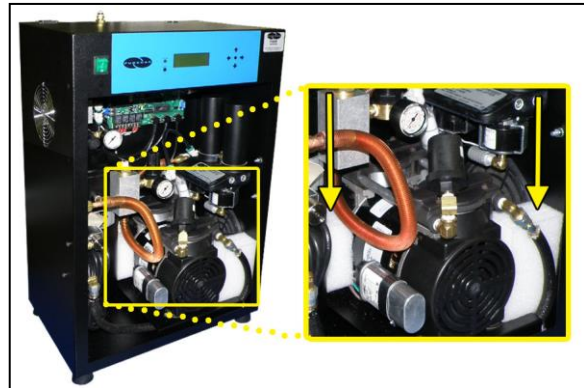
**NOTE:** If ANY SHIPPING DAMAGE is detected, file a claim with the shipping company prior to continuing the installation procedures.



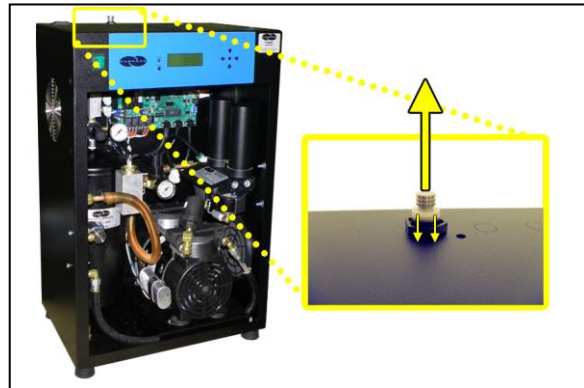
- 6.5.4** Remove the ship-loose contents package.



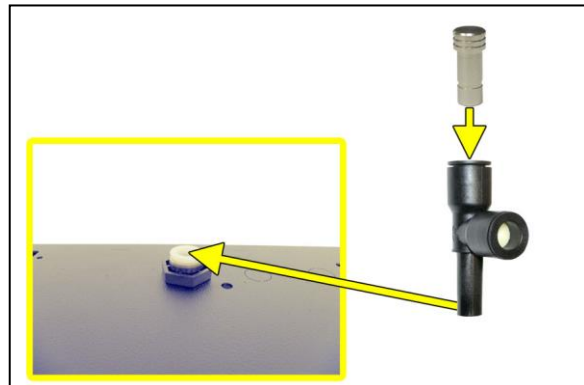
- 6.5.5** Remove and discard the packing foam blocks from around the Compressor.



- 6.5.6** Remove the Plug from the Outlet Port by pressing the ferrule down then pulling the plug upward.



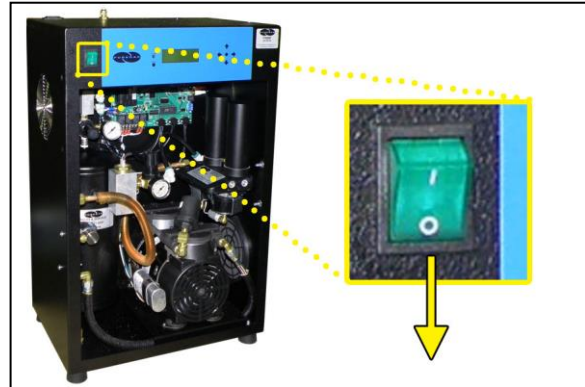
- 6.5.7** Install the Plug into the included Precision Bleed Orifice Fitting and then into the dryer Outlet Port.



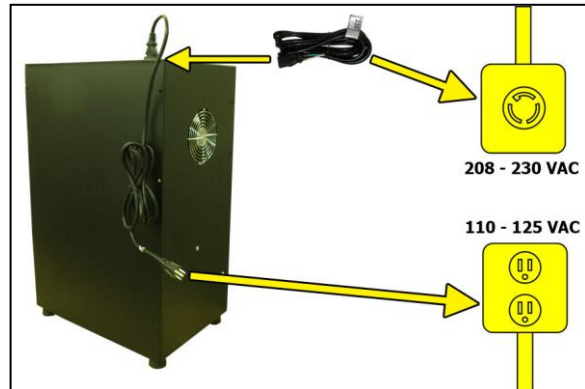


**6.5.8** Place the dryer at the desired operating location:

- Place the dryer on a leveled surface
- For rack install use Universal Rack Mounting Kit P011674 (section 11.4 )
- For wall install use Wall Mounting Kit P011773 (section 11.4 )

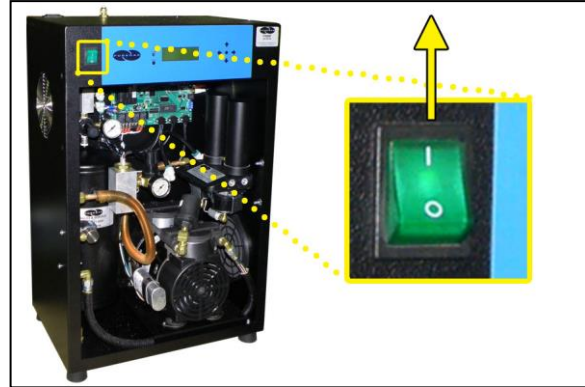
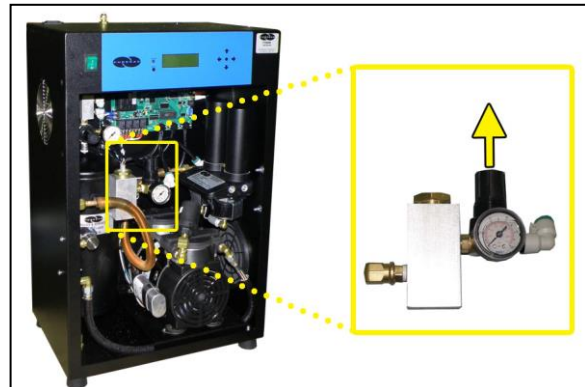
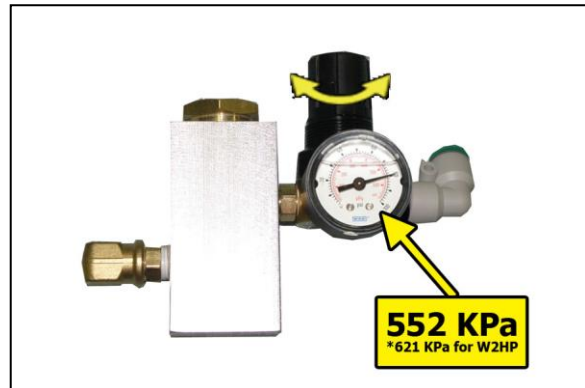
**6.5.9** Verify that the dryer is powered **OFF**.**6.5.10** Plug AC Power Cord to dryer.**6.5.11** Wire or plug the power cord into:

- 110 - 125 VAC power outlet for P1500W2, P1500W2LP & P1500W2HP models.
- 208 - 230 VAC, 1 phase, power outlet for P1502W2, P1502W2LP & P1502W2HP models.
  - Line – Black (Brown)
  - Neutral – White (Blue)
  - Ground – Green (Green/Yellow)

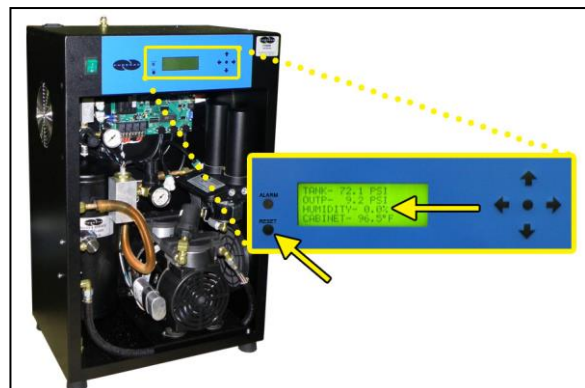


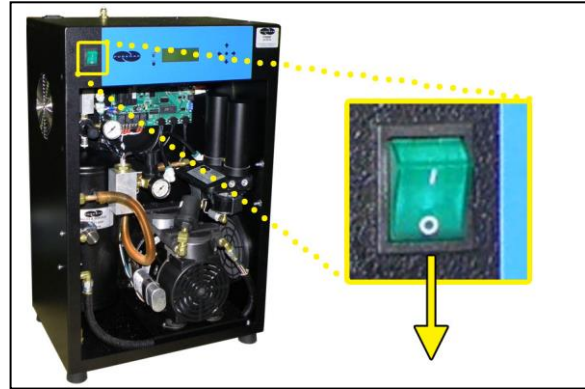
**6.5.12** Power the dryer **ON**.

**NOTE:** The Compressor and heatless dryer will start, creating air flow through the Outlet Port.

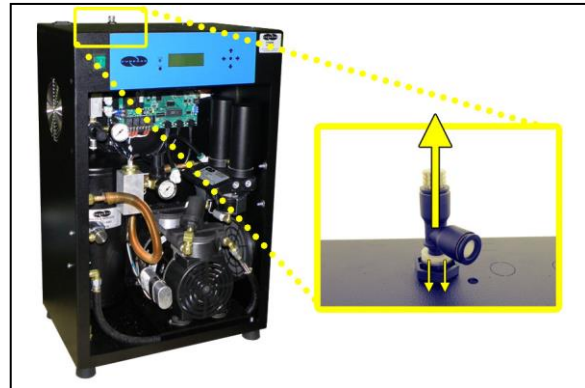
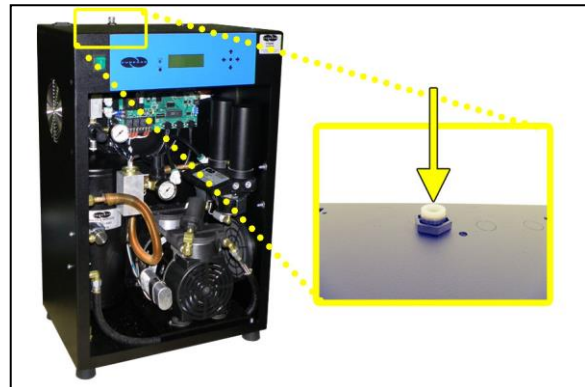
**6.5.13** Set the System Pressure:  
**With Compressor running:****6.5.13.1** Pull the Capacity Control Valve knob out.**6.5.13.2** Turn the knob until the reading on the pressure gauge is:  
**552 kPa** for W2 & W2LP**621 kPa** for W2HP**6.5.13.3** Push the knob in to lock.**6.5.14** Let the dryer run until the Humidity drops below 2% (may take up to 15 minutes).

**NOTE:** Press the **RESET** Button if the dryer goes into **SHUTDOWN** mode.

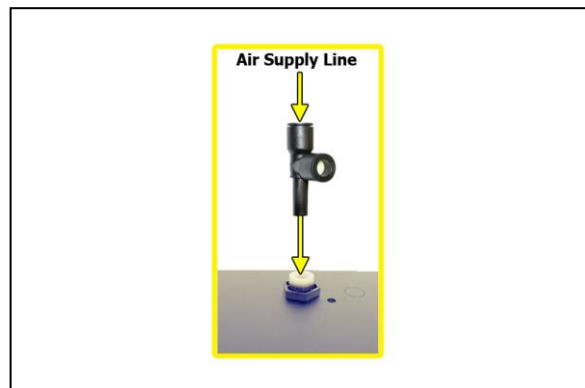


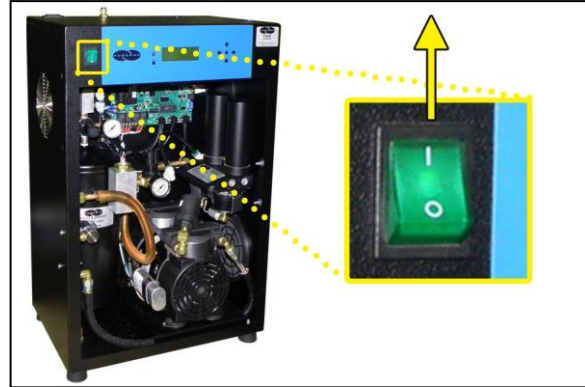
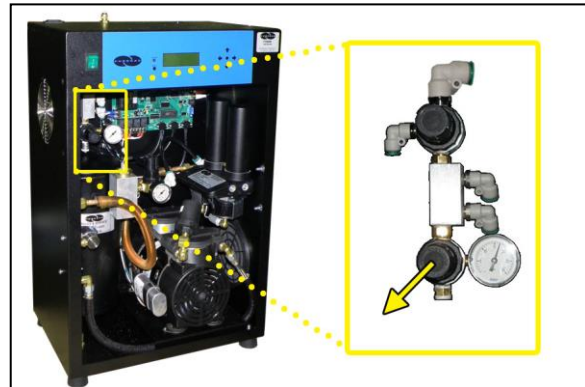
**6.5.15** Power the dryer **OFF**.**6.5.16** Remove the Precision Bleed Orifice fitting from the Outlet Port by pressing the ferrule down then pulling the fitting upward.

**NOTE:** Save this fitting for use in low flow applications.

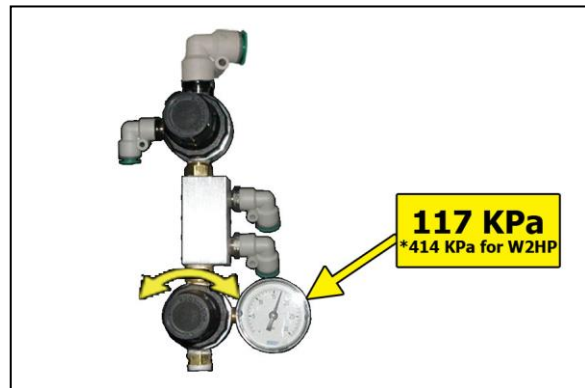
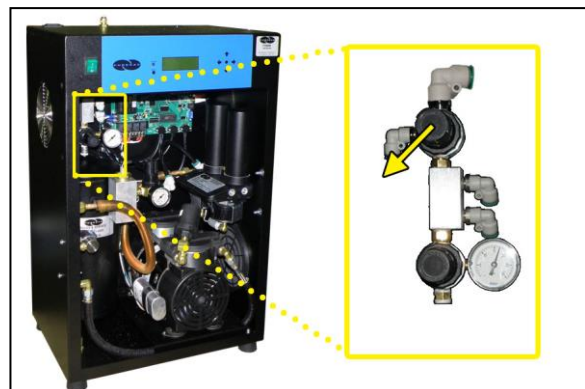
**6.5.17** Connect the air supply line to the Outlet Port.**NOTE: For all dryers with minimal FLOW:**

Install the included Precision Bleed Orifice fitting to maintain a constant air flow.



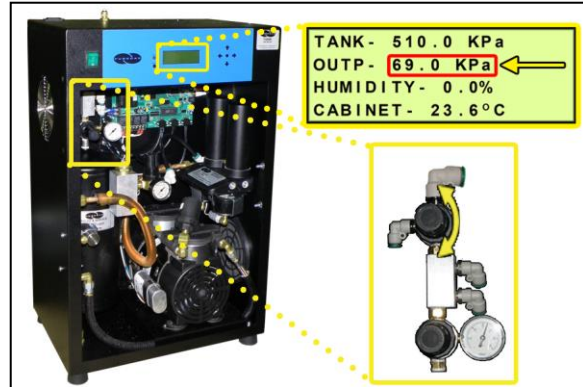
**6.5.18** Power the dryer **ON**.**6.5.19** Set the Static Pressure:**6.5.19.1** Pull Static Pressure  
Regulator knob out.**6.5.19.2** Turn knob until the  
reading on the pressure  
gauge is:**117 kPa** for W2 &

W2LP

**414 kPa** for W2HP**6.5.19.3** Push knob in to lock.**6.5.20** Set the Outlet Pressure:**6.5.20.1** Pull the Outlet  
Pressure Regulator knob  
out (or loosen the  
retaining nut – LP  
Models).

**6.5.20.2** Turn knob until  
Outlet Pressure (**OUTP**)  
reading is at the desired  
setting.

**6.5.20.3** Push knob in to lock  
(or tighten the retaining  
nut – LP Models).



**6.5.21** Check for air leaks:

**NOTE:** This is a general procedure that can be applied to any fitting or hose that has air pressure in it. **DO NOT SOAP TEST THE HUMIDITY SENSOR FITTING. DAMAGE TO THE SENSOR MAY OCCUR.**

**With Compressor NOT running:**

**6.5.21.1** Listen for any 'hissing' sounds which may indicate a fitting or hose air leak.

**With Compressor running:**

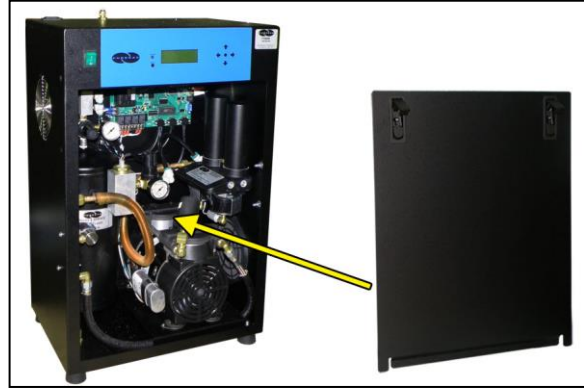
**6.5.21.2** Use a 1-inch paint  
brush to dab soapy water  
on the air fitting or hose  
connection to be tested.

If air bubbles appear at the  
connection, this indicates that  
air is leaking from the  
connection.



*If any leaks are detected, take steps to seal them off (as necessary):*

- *Tighten the fitting*
- *Re-connect loose hose*
- *Replace the fitting / hose / component*

**6.5.22** Re-install the Front Panel.**6.5.23 REGISTER YOUR DRYER.** *See section 7. for details.***6.6 Installation Checklist**

- ☐ No shipping damage was detected.
- ☐ Dryer location meets the following requirements:
  - Well ventilated
  - Free from abrasive dust or chemicals
  - Ambient temperature is between 5° and 30° C (optimal)
- ☐ Shipping foam blocks removed from Compressor.
- ☐ System Pressure is set to 552 kPa (80 PSI).
- ☐ Static Pressure is set to 117 kPa (17 PSI).
- ☐ No air leaks are present in the system.
- ☐ No alarms are present on the Display Panel.



## 7. Registering Your Dryer

Please take a moment to register your PUREGAS P1500W2 Series Air Dryer. Registering is necessary to activate the Limited Warranty on your product. Once you register, you are eligible to receive free technical support, as well as updates concerning your PUREGAS products.

Register Online at [www.puregas.com/registration](http://www.puregas.com/registration)

Or by Phone 1-800-521-5351 (option 2)

Have the following information available:

**Model #:** \_\_\_\_\_ **Serial #:** \_\_\_\_\_

**Company Name:** \_\_\_\_\_ **Location Name:** \_\_\_\_\_

**Shipping Address:** \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip Code:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_ **Phone #:** ( ) - ext. \_\_\_\_\_

**Email:** \_\_\_\_\_

## 8. Operating Your Dryer

### 8.1 Safety & Warning Information



#### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** Many procedures performed during installation, operation, testing, and maintenance of this air dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



#### **WARNING!**

**Internal surfaces may be hot.** Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



#### **WARNING!**

**High Noise.** PUREGAS air dryers are meant to be installed in an unattended area.



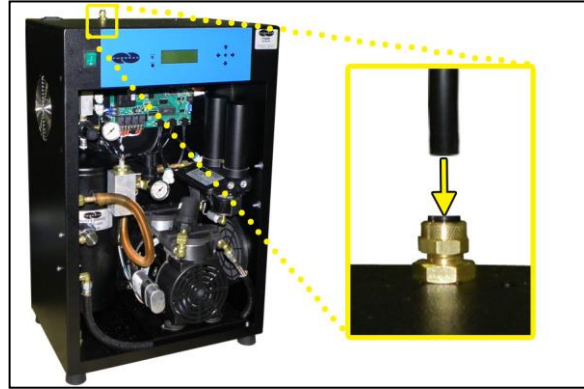
#### **IMPORTANT!**

Performing procedures not described in this User's Guide or installing components not supplied by PUREGAS is **NOT RECOMMENDED AND MAY VOID THE WARRANTY.**



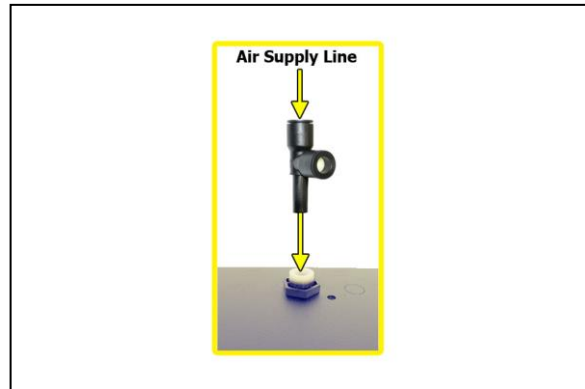
## 8.2 Connecting Air Supply Line to the Dryer

- 8.2.1** Connect the air supply line to the Outlet Port.



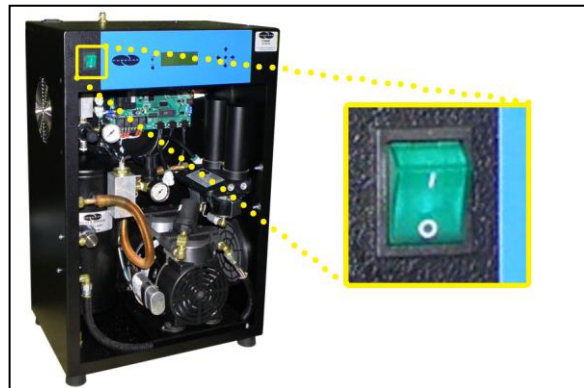
**NOTE: For all dryers with minimal FLOW:**

Install the included Precision Bleed Orifice fitting to maintain a constant air flow.



## 8.3 Powering the Dryer ON & OFF

- 8.3.1 POWER** Switch - Controls the main power to the dryer.

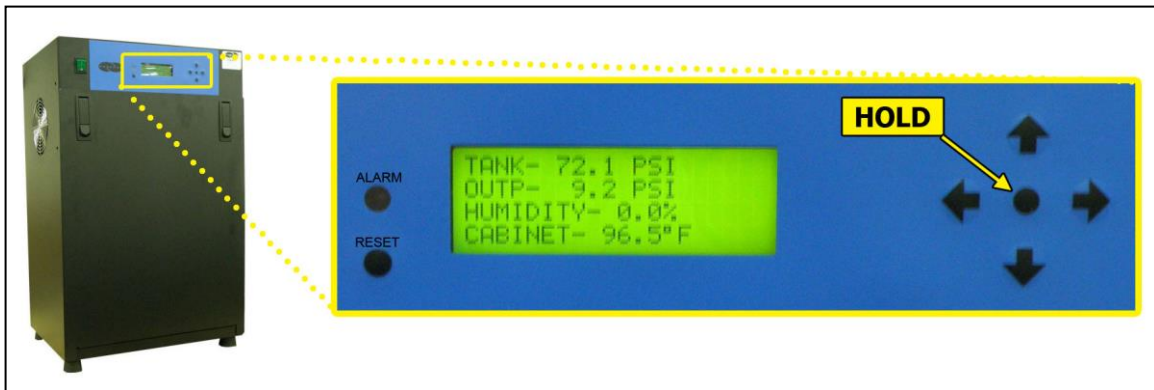


## 8.4 Using the Front Panel Display



### **CAUTION!**

The Display Screen is covered by a clear protective layer that guards against Electrostatic Discharge (ESD). DO NOT REMOVE THIS LAYER.



**8.4.1 ALARM LED** – Indicates an alarm is present.

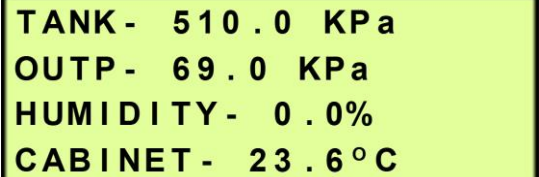
**8.4.2 RESET Button** – Clears an alarm and allows the system to continue operating.

**8.4.3 HOLD Button** – Freezes the current information screen on the display. When pressed again, it will allow the information screens to begin cycling again.

**8.4.4 Arrow Buttons** – Used to access, navigate, and change values in the Set Point Adjust screens.

**8.4.5 Display Screen** - Shows the current dryer readings. Will cycle between the following information screens (unless the **HOLD** button has been pressed):

**8.4.5.1 Tank Screen**



TANK - 510.0 KPa  
OUTP - 69.0 KPa  
HUMIDITY - 0.0%  
CABINET - 23.6 °C

**TANK** – Air Tank pressure - fluctuates between:


- **172 – 620 kPa\*** for P1500W2, P1500W2LP, P1502W2 & P1502W2LP models (\* 345 - 620 kPa for Dryers using Firmware v2.84 and older)
- **414 – 620 kPa** for P1500W2HP & P1502W2HP models

**OUTP** – Outlet Pressure regulated by the Outlet Pressure Regulator

**HUMIDITY** – Humidity level of the system

**CABINET** – Temperature of the dryer cabinet compartment

**8.4.5.2 System Stat Screen**



SYSTEM STAT ON RUN  
DUTY CYCLE 50%  
TTL TIME 7HRS  
FLOW - 42.5 SCMD

**SYSTEM STAT** - Running Status of the system:

- **ON RUN** – System is Online
- **SHUTDOWN** – System has been shutdown as a result of either a Humidity or High Cabinet Temperature alarm

**DUTY CYCLE** – The percentage of time the Compressor is ON versus time it is OFF during the Tank pressurization cycle.

**TTL TIME** – How many hours the Compressor has run since startup or the last time the Total Time counter was reset.

**FLOW** – Air Flow Rate

## 8.5 Identifying Dryer Alarms

### 8.5.1 High Outlet Pressure Alarm -

Occurs when the Outlet Pressure (OUTP) rises above the alarm set point for more than one (1) minute.

(Default setting is 83.0 kPa for W models, 51.71 kPa for WLP models & 241.0 kPa for WHP models)

*See section 13.5 for troubleshooting information.*

|            |       |     |             |
|------------|-------|-----|-------------|
| TANK -     | 510.0 | KPa |             |
| OUTP -     | 86.2  | KPa | <b>HALR</b> |
| HUMIDITY - | 0.0   | %   |             |
| CABINET -  | 23.6  | °C  |             |

### 8.5.2 Low Outlet Pressure Alarm –

Occurs when the Outlet Pressure (OUTP) drops below the alarm set point for more than one (1) minute.

(Default setting is 45.0 kPa for W models, 2.07 kPa for WLP models & 172.0 kPa for WHP models)

*See section 0 for troubleshooting information.*

|            |       |     |             |
|------------|-------|-----|-------------|
| TANK -     | 510.0 | KPa |             |
| OUTP -     | 41.4  | KPa | <b>LALR</b> |
| HUMIDITY - | 0.0   | %   |             |
| CABINET -  | 23.6  | °C  |             |

### 8.5.3 High Humidity Alarm –

Occurs when the Humidity level rises above the alarm set point for more than one (1) minute.  
(Default setting is 10.0%)

If this alarm is present for one (1) minute or more, the air dryer will go into **SHUTDOWN** mode to prevent saturated air from being delivered to the supply line.

|            |       |     |            |
|------------|-------|-----|------------|
| TANK -     | 510.0 | KPa |            |
| OUTP -     | 69.0  | KPa |            |
| HUMIDITY - | 10.5  | %   | <b>ALR</b> |
| CABINET -  | 23.6  | °C  |            |

|             |                 |
|-------------|-----------------|
| SYSTEM STAT | <b>SHUTDOWN</b> |
| DUTY CYCLE  | 41.6%           |
| TTL TIME    | 7HRS            |
| FLOW-       | 8.97 SCMD       |

*See section 13.9 for troubleshooting information.*

#### 8.5.4 High Cabinet Temperature Alarm -

Occurs when the temperature in the cabinet rises above 49°C for more than ten (10) seconds.

|                              |
|------------------------------|
| TANK - 510.0 KPa             |
| OUTP - 69.0 KPa              |
| HUMIDITY - 0.0%              |
| CABINET - 63.6 °C <b>ALR</b> |

If this alarm is present for three (3) minutes or more, the Compressor will **SHUTDOWN** to protect against damage due to overheating. Once the temperature lowers to 45°C the Compressor will re-start.

*See section 13.12 for troubleshooting information.*

#### 8.5.5 High Duty Cycle Alarm –

Occurs when the Duty Cycle rises above the alarm set point for more than one (1) minute.  
(Default setting is 70%)

|                             |
|-----------------------------|
| SYSTEM STAT ON RUN          |
| DUTY CYCLE 51.6% <b>ALR</b> |
| TTL TIME 7HRS               |
| FLOW- 8.97 SCMD             |

*See section 13.17 for troubleshooting information.*

#### 8.5.6 Total Time Alarm –

Occurs when the Compressor has reached an 8,000 hour maintenance interval. Perform the required maintenance.

|                             |
|-----------------------------|
| SYSTEM STAT ON RUN          |
| DUTY CYCLE 41.6%            |
| TTL TIME 8007HRS <b>ALR</b> |
| FLOW- 8.97 SCMD             |

*See section 10.3 for maintenance information.*

#### 8.5.7 High Flow Rate Alarm –

Occurs when the Flow Rate rises above the alarm set point for more than one (1) minute.  
(Default setting is 42 SCMD for W2 & W2LP models, 28.3 SCMD for W2HP models.)

|                            |
|----------------------------|
| SYSTEM STAT ON RUN         |
| DUTY CYCLE 41.6%           |
| TTL TIME 7HRS              |
| FLOW- 42.4 SCMD <b>ALR</b> |

*See section 13.11 for troubleshooting information.*

## 8.6 Adjusting & Resetting Dryer Set Points

Dryer Set Points are simply limits programmed for a specific reading. Once this limit is reached (or exceeded) this results in an alarm for that reading. Each of these set points is factory programmed with a default value based on typical usage of the air dryer. Many of the set points for dryer alarms can be modified to levels more closely based upon your specific application.

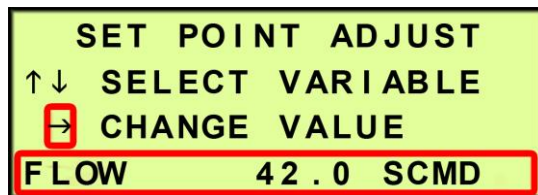
**NOTE:** Reference Appendix Section 14.2 for Limits, Defaults, and Formats.

- Press the Up (↑) Arrow Button to access the Set Point Adjust screens.
- Press the Up (↑) & Down (↓) Arrow Buttons to navigate through the available Set Point Adjust screens.
- To change a specific Set Point:

### 8.6.1 High Flow Rate Alarm Set Point (default setting is 42 SCMD for W2 & W2LP models, 28.3 SCMD for W2HP models) –

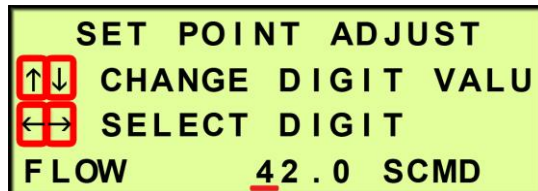
#### 8.6.1.1 Press the Right (→) Arrow Button to access the

Change Value Screen.



#### 8.6.1.2 Press the Right (→) & Left (←) Arrow Buttons to

move the underscore beneath the digit to change.

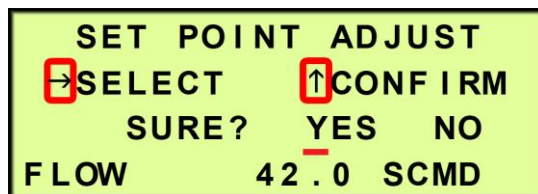


#### 8.6.1.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

#### 8.6.1.4 Press the Right (→) Arrow Button until the underscore disappears.

#### 8.6.1.5 Press the Right (→) Arrow Button until the underscore appears under the correct setting (YES or NO).

#### 8.6.1.6 Press the Up (↑) Arrow to confirm. This will lock in the new setting value.



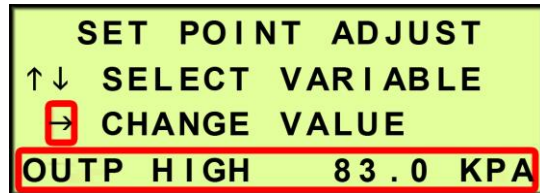


### 8.6.2 High Outlet Pressure Alarm Set Point

(Default setting is 83.0 kPa for W models, 51.71 kPa for WLP models & 241.0 kPa for WHP) –

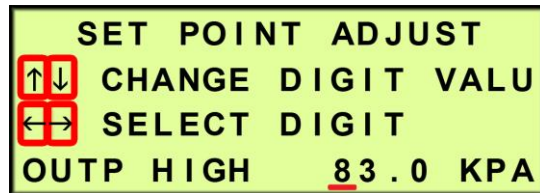
#### 8.6.2.1 Press the Right (→) Arrow Button to access the

Change Value Screen.



#### 8.6.2.2 Press the Right (→) & Left (←) Arrow Buttons to

move the underscore beneath the digit to change.

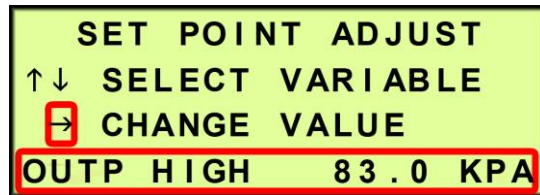


#### 8.6.2.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

#### 8.6.2.4 Press the Right (→) Arrow Button until the underscore disappears.

#### 8.6.2.5 Press the Right (→) Arrow Button until the

underscore appears under the correct setting (YES or NO).



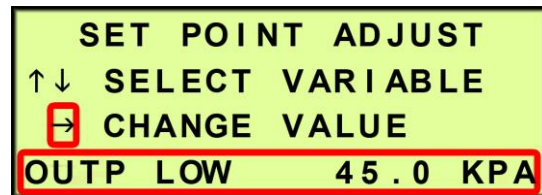
#### 8.6.2.6 Press the Up (↑) Arrow to confirm. This will lock in the new setting value.

### 8.6.3 Low Outlet Pressure Alarm Set Point

(Default setting is 45.0 kPa for W models, 2.07 kPa for WLP models & 172.0 kPa for WHP models) –

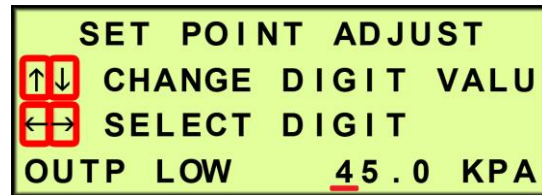
#### 8.6.3.1 Press the Right (→) Arrow Button

to access the Change Value Screen.



#### 8.6.3.2 Press the Right (→) & Left (←) Arrow Buttons

to move the underscore beneath the digit to change.



#### 8.6.3.3 Press the Up (↑) & Down (↓) Arrow Buttons

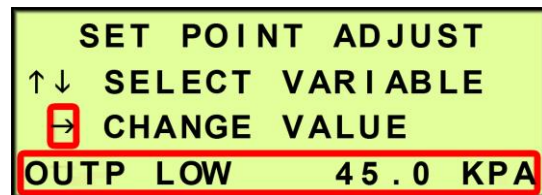
to change the value of the selected digit.

#### 8.6.3.4 Press the Right (→) Arrow Button

until the underscore disappears.

#### 8.6.3.5 Press the Right (→) Arrow Button

until the underscore appears under the correct setting (YES or NO).



#### 8.6.3.6 Press the Up (↑) Arrow

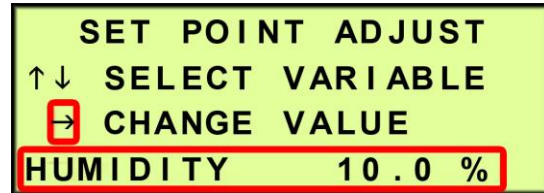
to confirm. This will lock in the new setting value.



#### 8.6.4 High Humidity Alarm Set Point (default setting is 10.0%) –

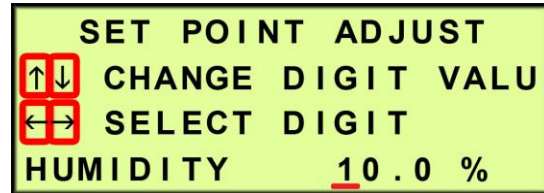
##### 8.6.4.1 Press the Right (→) Arrow Button to access the

Change Value Screen.



##### 8.6.4.2 Press the Right (→) & Left (←) Arrow Buttons to

move the underscore beneath the digit to change.

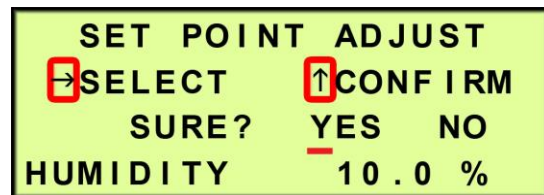


##### 8.6.4.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

##### 8.6.4.4 Press the Right (→) Arrow Button until the underscore disappears.

##### 8.6.4.5 Press the Right (→) Arrow Button until the

underscore appears under the correct setting (YES or NO).

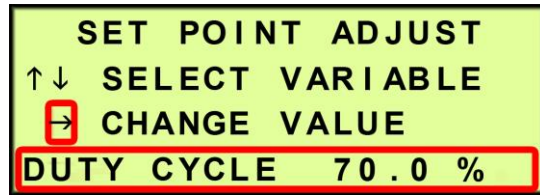


##### 8.6.4.6 Press the Up (↑) Arrow to confirm. This will lock in the new setting value.

### 8.6.5 High Duty Cycle Alarm Set Point (default setting is 70.0%) –

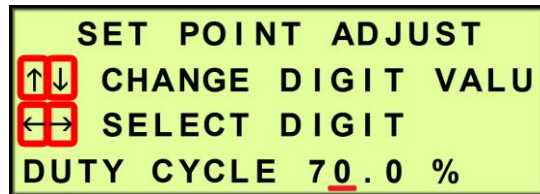
#### 8.6.5.1 Press the Right (→) Arrow Button to access the

Change Value Screen.



#### 8.6.5.2 Press the Right (→) & Left (←) Arrow Buttons to

move the underscore beneath the digit to change.

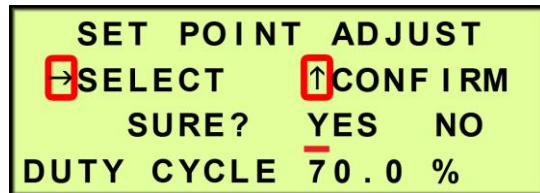


#### 8.6.5.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

#### 8.6.5.4 Press the Right (→) Arrow Button until the underscore disappears.

#### 8.6.5.5 Press the Right (→) Arrow Button until the

underscore appears under the correct setting (YES or NO).



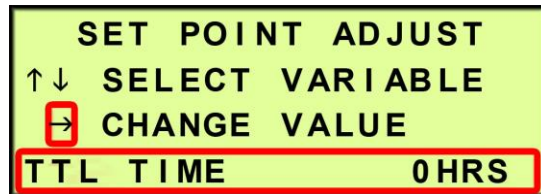
#### 8.6.5.6 Press the Up (↑) Arrow to confirm. This will lock in the new setting value.

### 8.6.6 Compressor Total Time Reset –

The Total Time (**TTL TIME**) is the time the Compressor runs measured in hours since startup or the last time the Compressor time counter was reset. The dryer will display an alarm when this counter has reached 8,000 hours, signaling is it time for maintenance.

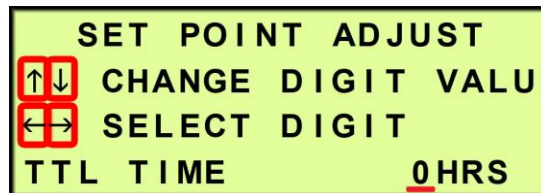
#### 8.6.6.1 Press the Right (→) Arrow Button to access the

Change Value Screen.



#### 8.6.6.2 Press the Right (→) & Left (←) Arrow Buttons to

move the underscore beneath the digits to change to zero (0).

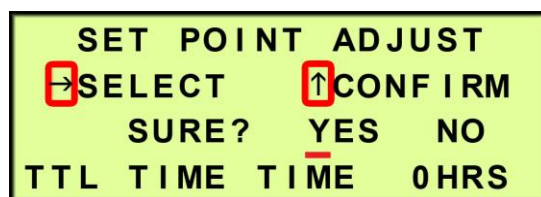


#### 8.6.6.3 Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.

#### 8.6.6.4 Press the Right (→) Arrow Button until the confirmation screen appears.

#### 8.6.6.5 Press the Right (→) Arrow Button until the

underscore appears under the correct setting (**YES** or **NO**).



#### 8.6.6.6 Press the Up (↑) Arrow to confirm. This will lock in the new setting value.

### 8.6.7 Reset to Factory Values –

**8.6.7.1** Press the Left (←) & Right (→) Arrow Buttons at the same time.

```

SET POINT ADJUST
↑ ↓  SELECT VARIABLE
← →  RESET TO FACTORY
      VALUES
  
```

**8.6.7.2** Press the Right (→) Arrow Button until the underscore appears under the correct setting (YES or NO).

```

SET POINT ADJUST
→ SELECT      ↑ CONFIRM
RESET TO FACTORY VAL
SURE?   _ YES  NO
  
```

**8.6.7.3** Press the Up (↑) Arrow to confirm. This will lock in the factory default values.

### 8.6.8 Alarm Delays Set Point -

The Alarm Delay allows the dryer to come out of the alarm condition on its own without signaling an alarm.

**ON** (default) – waits one (1) minute before signaling alarms

**OFF** – signals alarms immediately

**8.6.8.1** Press the Right (→) Arrow Button to change the value.

```

SET POINT ADJUST
↑ ↓  SELECT VARIABLE
→ CHANGE VALUE
ALARM DELAYS ON
  
```

**8.6.8.2** Press the Right (→) Arrow Button until the underscore appears under the correct setting (OFF or ON).

```

SET POINT ADJUST
→ SELECT      ↑ CONFIRM
ALARM DELAYS
OFF   _ ON
  
```

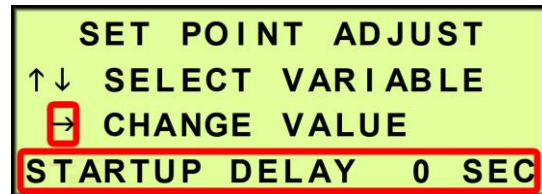
**8.6.8.3** Press the Up (↑) Arrow to confirm. This will lock in the new setting value.

**8.6.9 Startup Delay Set Point** (default setting is 0 sec) –

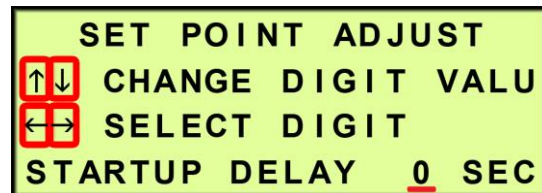
The Startup Delay keeps the Compressor from turning on immediately when the dryer is powered on for up to 10 seconds. This allows multiple dryers to power on in separate intervals in case of a power loss.

**8.6.9.1** Press the Right (→) Arrow Button to access the

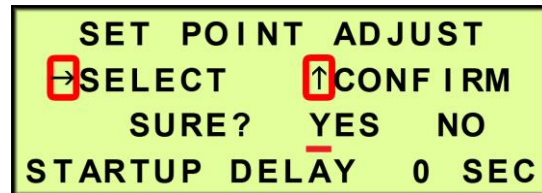
Change Value Screen.

**8.6.9.2** Press the Right (→) & Left (←) Arrow Buttons to

move the underscore beneath the digit to change.

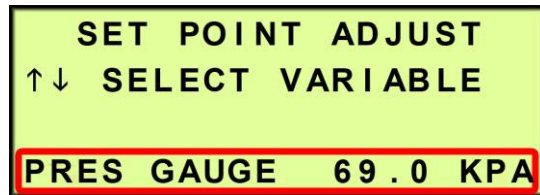
**8.6.9.3** Press the Up (↑) & Down (↓) Arrow Buttons to change the value of the selected digit.**8.6.9.4** Press the Right (→) Arrow Button until the underscore disappears.**8.6.9.5** Press the Right (→) Arrow Button until the

underscore appears under the correct setting (YES or NO).

**8.6.9.6** Press the Up (↑) Arrow to confirm. This will lock in the new setting value.

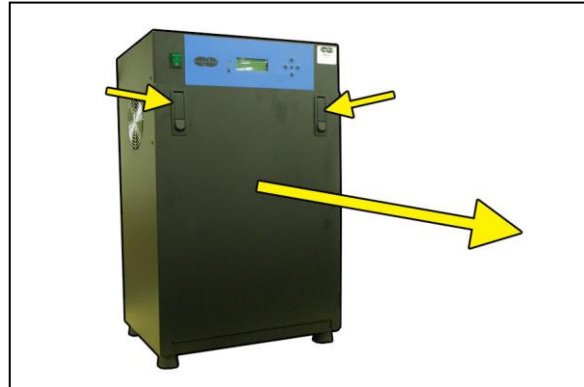
### 8.6.10 Pressure Gauge –

This is an information screen only and will not time-out, returning to the cycling information screens. It also masks air dryer alarms while in use. This screen can be used during air dryer troubleshooting.



## 8.7 Open Front Panel

- 8.7.1** Open Front Panel latches and remove the Front Panel.

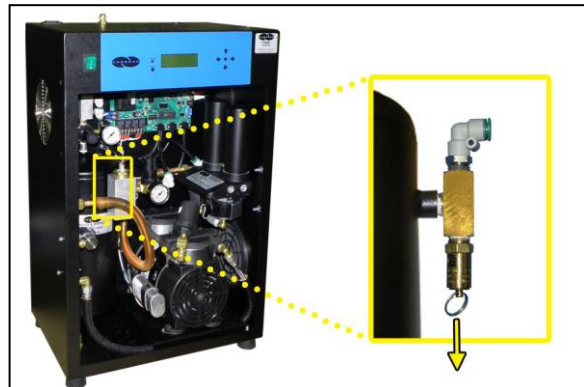


## 8.8 Depressurizing the Dryer

- 8.8.1** Open Front Panel (section 8.7 ).

- 8.8.2** Pull the ring handle on the Safety Relief Valve until all the air pressure is released.

- 8.8.3** To prevent pressure from building back up, power the dryer **OFF** (*See section 8.3 for detail*).



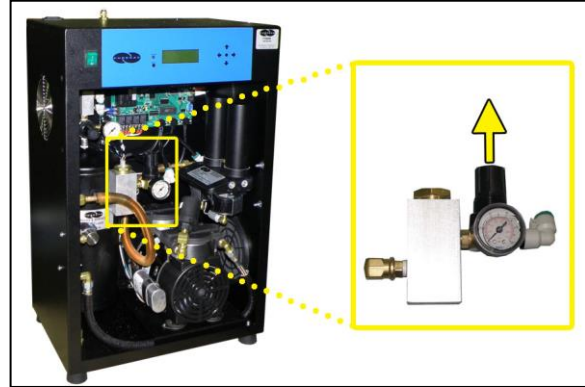
- 8.8.4** Close Front Panel.

## 8.9 Setting the System Pressure

**With Compressor running:**

**8.9.1** Open Front Panel (section 8.7 ).

**8.9.2** Pull the Capacity Control Valve knob out.

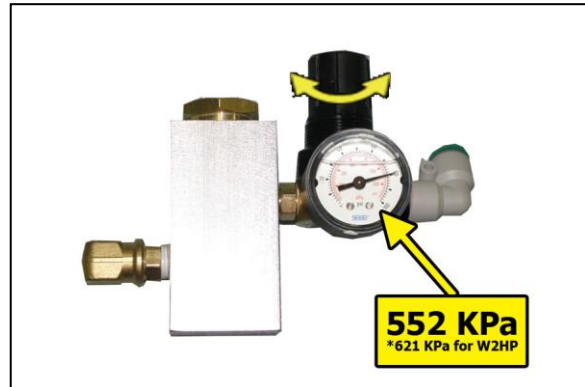


**8.9.3** Turn the knob until the reading on the Pressure Gauge is:

**552 kPa** for W and WLP

**621 kPa** for WHP

**8.9.4** Push the knob in to lock.

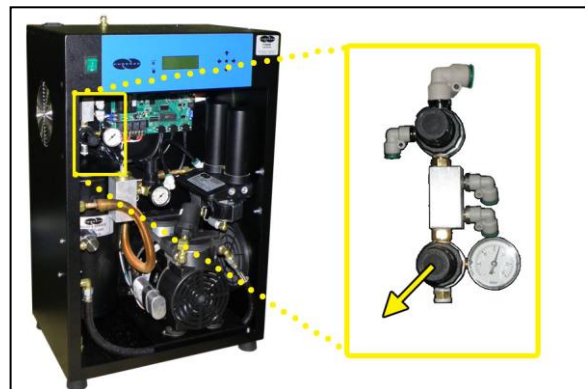


**8.9.5** Close Front Panel.

## 8.10 Setting the Static Pressure

**8.10.1** Open Front Panel (section 8.7 ).

**8.10.2** Pull the Static Pressure Regulator knob out.

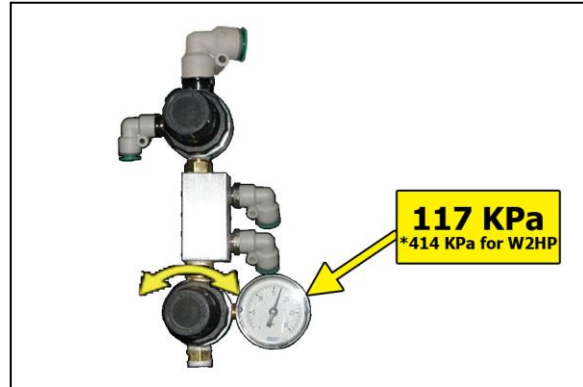




- 8.10.3** Turn knob until the reading on the Pressure Gauge is:  
**117 kPa** for W and WLP  
**414 kPa** for WHP

- 8.10.4** Push knob in to lock.

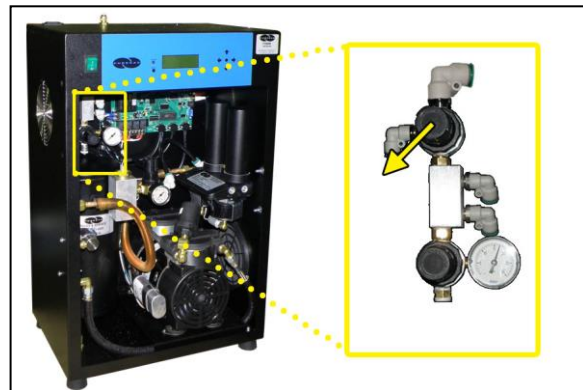
- 8.10.5** Close Front Panel.



## 8.11 Setting the Outlet Pressure

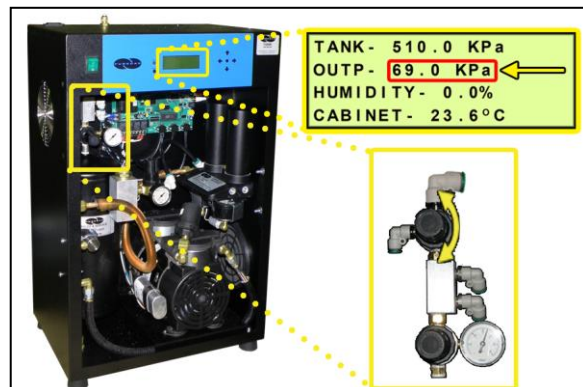
- 8.11.1** Open Front Panel (section 8.7 ).

- 8.11.2** Pull the Outlet Pressure Regulator knob out (or loosen the retaining nut – LP Models).



- 8.11.3** Turn knob until Outlet Pressure (**OUTP**) reading is at the desired setting.

- 8.11.4** Push knob in to lock (or tighten the retaining nut – LP Models).



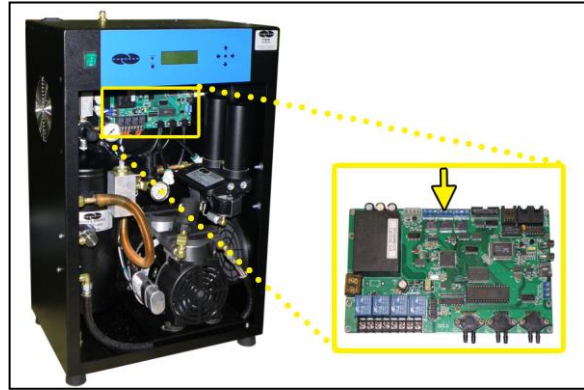
- 8.11.5** Close Front Panel.



## 8.12 Connecting to Common Alarm Terminals

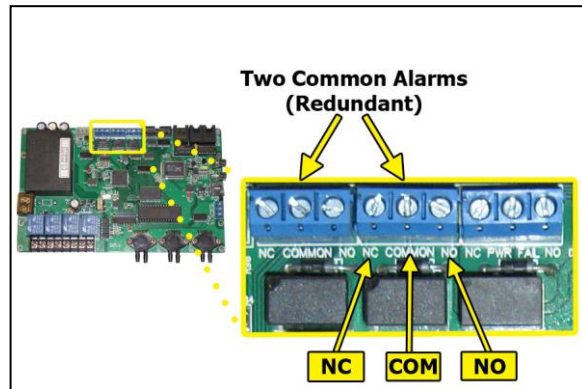
**8.12.1** Open Front Panel (section 8.7 ).

**8.12.2** Locate the external Common Alarm pins on the Control Board.



**8.12.3** Wire the Common Alarm wire pair to the Control Board as required:

- **COMMON & NO** for CLOSE ON ALARM operation.
- **NC & COMMON** for OPEN ON ALARM operation.

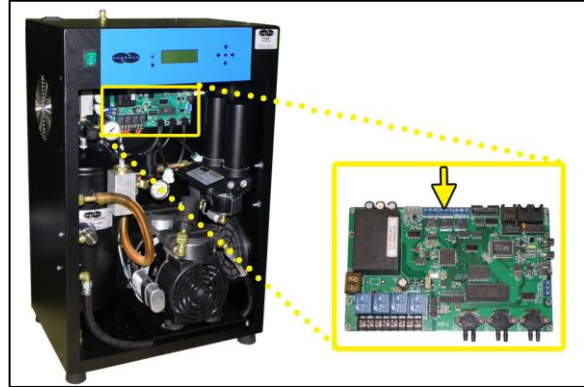


**8.12.4** Close Front Panel.

## 8.13 Connecting to Power Fail Alarm Terminals

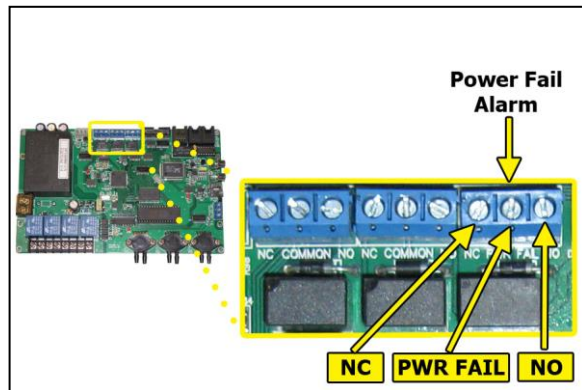
8.13.1 Open Front Panel (section 8.7 ).

8.13.2 Locate the external Power Fail pins on the Control Board.



8.13.3 Wire the Power Fail Alarm wire pair to the Control Board as required:

- **PWR FAIL & NO** for CLOSE ON ALARM operation.
- **NC & PWR FAIL** for OPEN ON ALARM operation



8.13.4 Close Front Panel.

## 8.14 Connecting via Web Browser

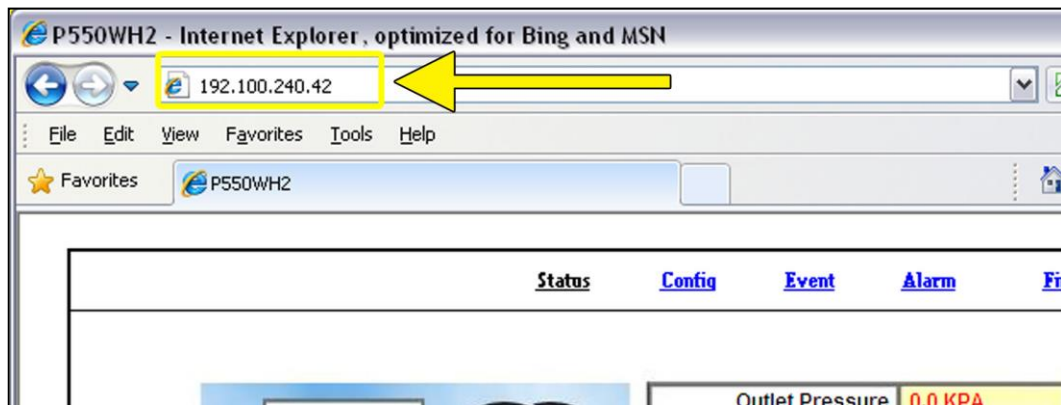
### If the Air Dryer IS connected to an IP network:

- The Air Dryer must be configured with a valid IP Address, Subnet Mask, and Gateway Address for the network.
- An IP cable is connecting the Air Dryer to the network.
- Use a computer that is on the same network as the air Dryer.
- Use Internet Explorer (6.0 or newer) or Mozilla Firefox Web Browser.

### If the Air Dryer IS NOT connected to an IP network and has not been configured with IP information:

- Use the default IP Address (*192.168.1.100*) of the air dryer to connect.
- Use an IP Cable (may require Cross-over cable) plugged directly into a Laptop/PC and the other end plugged into the UTP Port on the Control Board of the Air Dryer.
- Configure the network card on the Laptop/PC to use the IP Address *192.168.1.101*. This will make the Laptop/PC compatible with the Air Dryer.
- Use Internet Explorer (6.0 or newer) or Mozilla Firefox Web Browser.

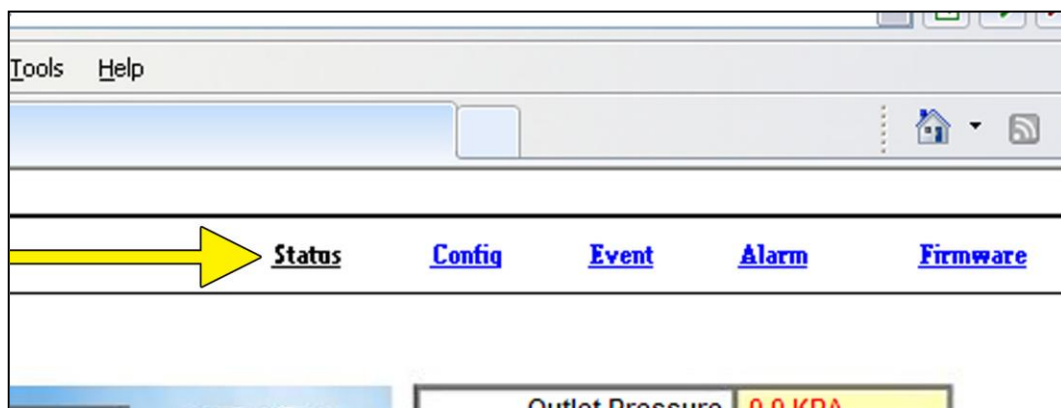
**8.14.1** Type the IP Address of the P1500W2 Series air Dryer in the Address text box of the web browser.



The Web Browser connection offers five (5) screens to the user:

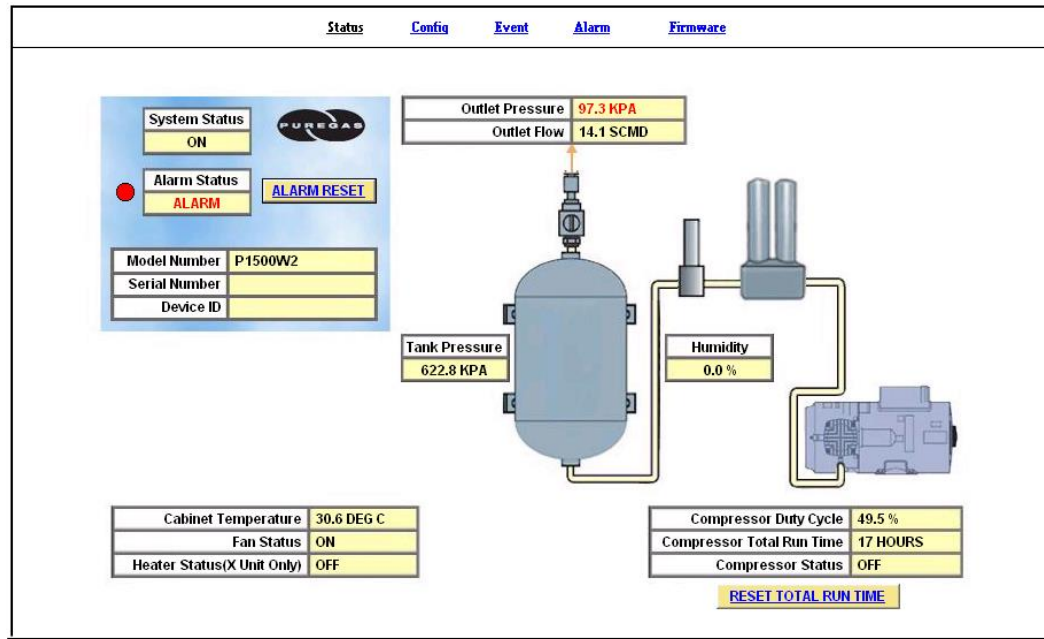
- **Status Screen** - Displays the readings and alarms monitored in the P1500W2 Series Air Dryer. Provides remote ALARM RESET.
- **Config Screen** - All configurations of Set Points, Setups, and Keyword can be made in this screen.
- **Event Screen** - Displays all events such as alarms, changes made, and alarm resets registered by the P1500W2 Series Air Dryer. This screen is informational only.
- **Alarm Screen** - Displays all the Alarms registered by the P1500W2 Series Air Dryer. This screen is informational only.
- **Firmware Screen** – Allows the user to upload any software updates or upgrades to the Air Dryer.

**8.14.2** Click on the Menu Bar selection to access a specific screen.

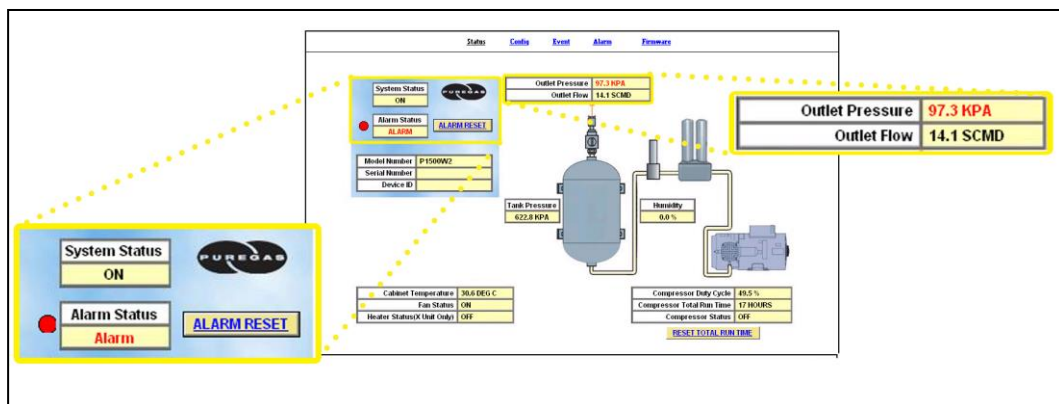


## 8.15 Using the Status Screen

Displays the readings and alarms monitored in the P1500W2 Series Air Dryer.  
Provides remote ALARM RESET.



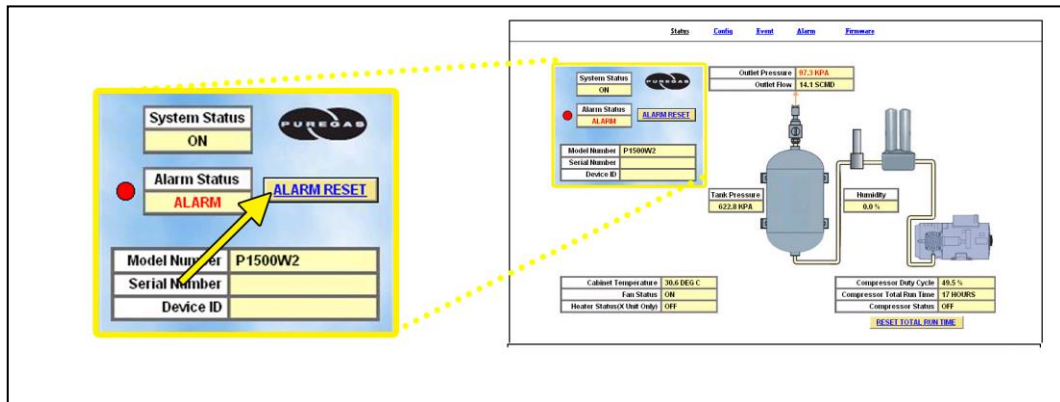
- Readings are displayed in **BLACK** unless an alarm is present.
- Alarms are displayed in **RED** next to the parameter in alarm.



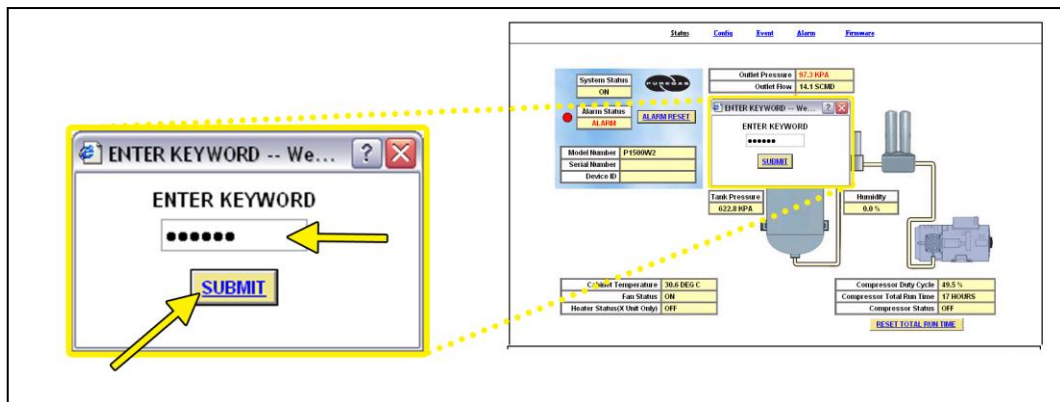
- Alarm Status will display **Alarm** if any alarms are present.
- Keyword validation is required for ALARM RESET and RESET TOTAL RUN TIME.

### 8.15.1 Resetting an Alarm

**8.15.1.1** Click on the **ALARM RESET** Button to remotely reset Air Dryer alarms displayed on Status Screen.



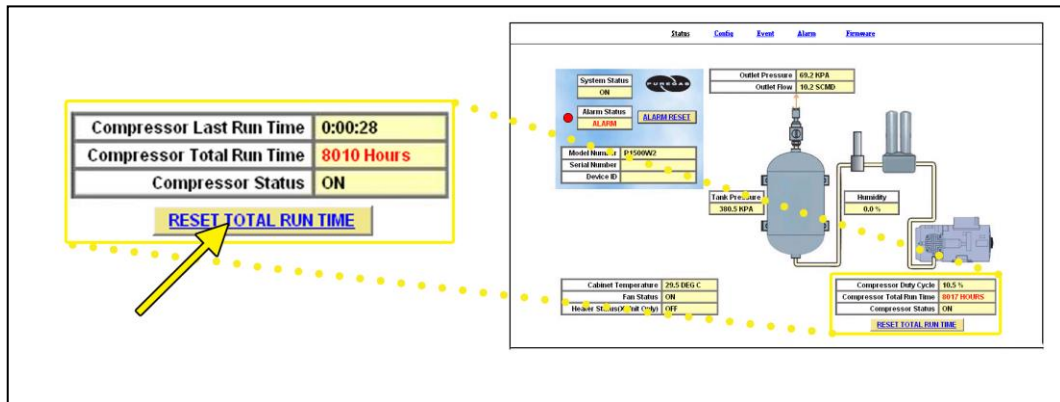
**8.15.1.2** Enter Keyword (default is 123456)



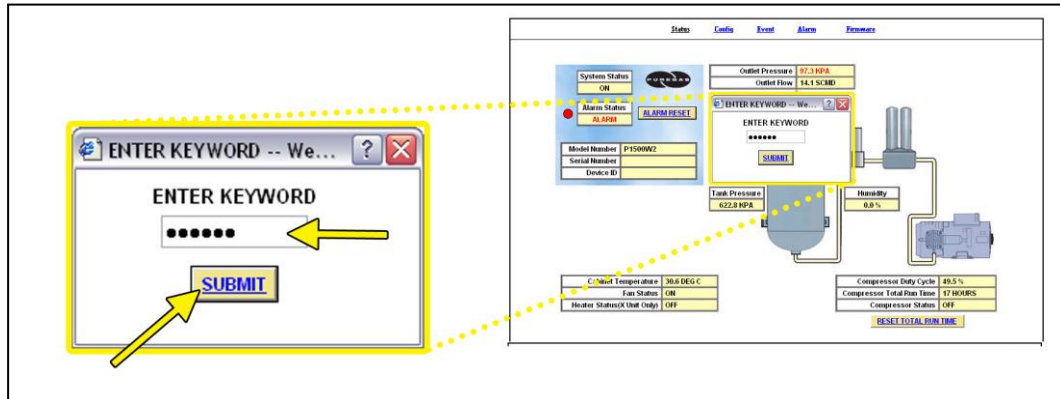
**8.15.1.3** Click on **SUBMIT** Button when done.

## 8.15.2 Resetting Compressor Total Run Time

**8.15.2.1** Click on the **RESET TOTAL RUN TIME** Button to remotely reset Compressor Total Run Time displayed on Status Screen.



**8.15.2.2** Enter Keyword (default is 123456)



**8.15.2.3** Click on **SUBMIT** Button when done.

## 8.16 Using the Config Screen

All configuration of Set Points, Setups, and Keyword can be made in this screen.

**NOTE:** Reference Appendix section 14.2 for Limits, Defaults, and Formats.

The screenshot shows the 'Config' tab selected. At the top, there are tabs for 'Status', 'Config', 'Event', 'Alarm', and 'Firmware'. Below the tabs, the 'SYSTEM SETUP' section includes an 'ALARM DELAY' toggle set to 'ON'. A table lists system setup items: 'START UP DELAY' with a set point of '0' and unit 'SECONDS'. The 'ALARM SETUP' section contains a table with five rows: 'HIGH FLOW' (42.0 SCMD), 'HIGH OUTLET PRESSURE' (83.0 KPA), 'LOW OUTLET PRESSURE' (45.0 KPA), 'HIGH HUMIDITY' (10.0 %), and 'HIGH DUTY CYCLE' (70.0 %). The 'NETWORK SETUP' section has a table with fields for 'IP ADDRESS' (192.168.1.100), 'SUBNET MASK' (255.255.255.0), 'GATEWAY ADDRESS' (0.0.0.0), 'SNMP TRAP SERVER ADDRESS' (0.0.0.0), 'CURRENT DATE/TIME' (01/11/12 13:26), and 'DEVICE ID'. At the bottom, there are two buttons: 'ACCEPT' and 'CHANGE KEYWORD'.

| SYSTEM SETUP   |           |         |
|----------------|-----------|---------|
| Description    | Set Point | Unit    |
| START UP DELAY | 0         | SECONDS |

ALARM DELAY: ☒ ON ☐ OFF

| ALARM SETUP          |           |      |
|----------------------|-----------|------|
| Description          | Set Point | Unit |
| HIGH FLOW            | 42.0      | SCMD |
| HIGH OUTLET PRESSURE | 83.0      | KPA  |
| LOW OUTLET PRESSURE  | 45.0      | KPA  |
| HIGH HUMIDITY        | 10.0      | %    |
| HIGH DUTY CYCLE      | 70.0      | %    |

| NETWORK SETUP            |                |
|--------------------------|----------------|
| IP ADDRESS               | 192.168.1.100  |
| SUBNET MASK              | 255.255.255.0  |
| GATEWAY ADDRESS          | 0.0.0.0        |
| SNMP TRAP SERVER ADDRESS | 0.0.0.0        |
| CURRENT DATE/TIME        | 01/11/12 13:26 |
| DEVICE ID                |                |

ACCEPT CHANGE KEYWORD

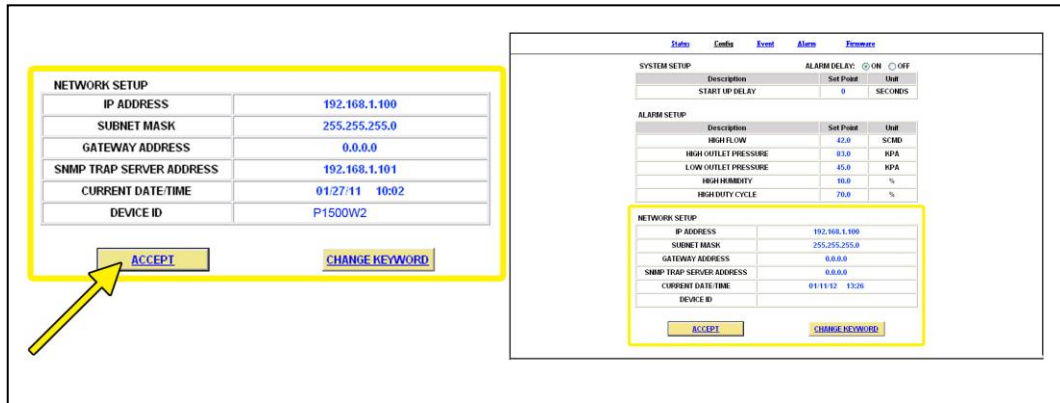
- Values in **BLUE** represent the current setting.
- The **ACCEPT** Button is used to change values.
- The **CHANGE KEYWORD** Button allows you to configure a new Keyword.
- Keyword validation is required for the following:
  - Changing a Set Point value
  - Changing the Keyword



### 8.16.1 Changing a Set Point or Setup value:

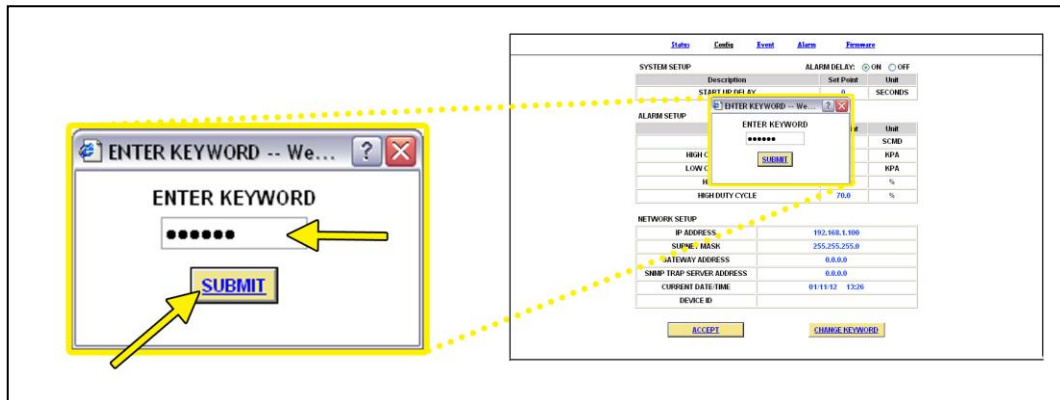
8.16.1.1 Click on the value to change.

8.16.1.2 Type in the new value.



8.16.1.3 Click the **ACCEPT** Button when done.

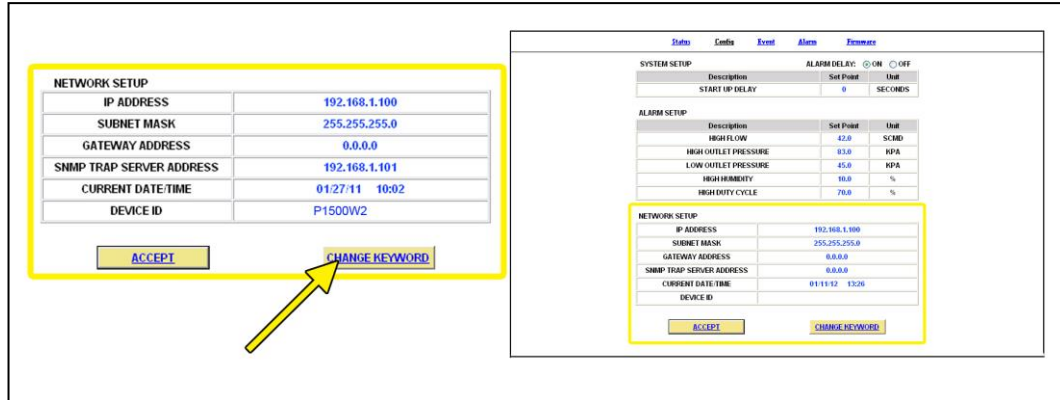
8.16.1.4 Enter Keyword (default is 123456)



8.16.1.5 Click on **SUBMIT** Button when done. This will lock in the new setting value.

## 8.16.2 Changing the Keyword

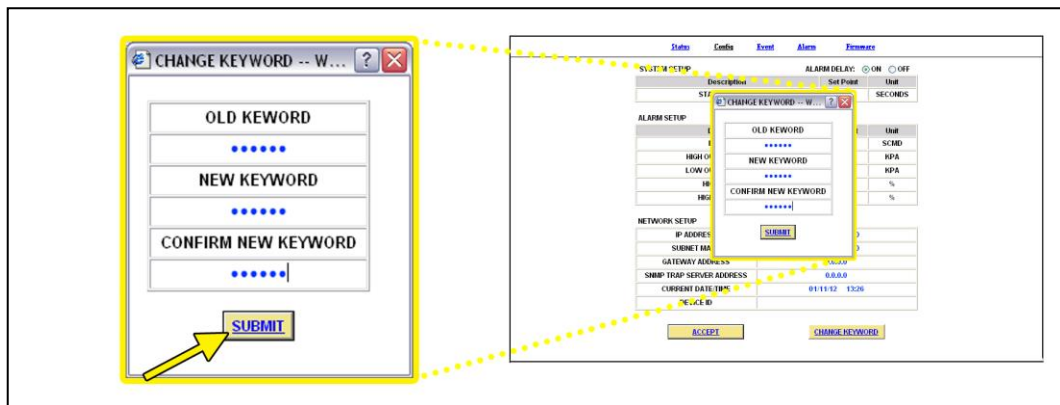
### 8.16.2.1 Click on **CHANGE KEYWORD** Button to change the keyword.



### 8.16.2.2 Type the Old Keyword.

### 8.16.2.3 Type the New Keyword.

### 8.16.2.4 Type the Confirm New Keyword.





### 8.16.2.5 Click on **SUBMIT** Button to confirm. This will lock in the new setting value.

## 8.17 Using the Event Screen

Displays all events such as alarms, changes made, and alarm resets registered by the P1500W2 Series Air Dryers. This screen is informational only.

| <a href="#">Status</a> <a href="#">Config</a> <a href="#">Event</a> <a href="#">Alarm</a> |                |             |          |            |          |  |
|---|----------------|-------------|----------|------------|----------|--|
| No.   | Event          | Description | Remark   | Date       | Time     |  |
| 1   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:32:42 |  |
| 2   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:31:47 |  |
| 3   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:29:40 |  |
| 4   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:27:41 |  |
| 5   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:16:44 |  |
| 6   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:14:10 |  |
| 7   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:12:53 |  |
| 8   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:11:44 |  |
| 9   | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:10:38 |  |
| 10  | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:09:32 |  |
| 11  | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:08:12 |  |
| 12  | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:08:06 |  |
| 13  | Alarm reset    |             | SRC:Key  | 01/27/2011 | 08:05:55 |  |
| 14  | Alarm reset    |             | SRC:IE   | 01/27/2011 | 07:44:30 |  |
| 15  | Device Restart |             | DownLoad | 01/26/2011 | 16:21:17 |  |
| 16  | Device Restart |             | DownLoad | 01/26/2011 | 16:20:17 |  |
| 17  | Device Restart |             | Power up | 01/25/2011 | 13:47:55 |  |
|   |                |             |          |            |          |  |





1 of 1

- Click on the column headings to sort data according to that column.
- Click the Arrow Buttons to navigate through all the event log pages.

## 8.18 Using the Alarm Screen

Displays all the Alarms registered by the P1500W2 Series Air Dryers. This screen is informational only.

| <a href="#">Status</a> <a href="#">Config</a> <a href="#">Event</a> <a href="#">Alarm</a> <a href="#">Firmware</a> |                                  |            |            |          |
|--|----------------------------------|------------|------------|----------|
| No.  | Description                      | Alarm Read | Date ▼     | Time ▼   |
| 1  | Maintenance Required Alarm       | ALARM      | 01/11/2012 | 13:24:46 |
| 2  | High Outlet Pressure Reading     | 97.3       | 01/11/2012 | 13:19:41 |
| 3  | High Cabinet Temperature Reading | 54.09      | 01/09/2012 | 19:06:54 |
| 4  | High Cabinet Temperature Reading | 50.80      | 01/09/2012 | 19:05:39 |
| 5  | High Cabinet Temperature Reading | 60.35      | 01/09/2012 | 19:04:13 |
| 6  | Low Outlet Pressure Reading      | 25.1       | 01/09/2012 | 19:00:21 |
| 7  | High Flow Reading                | 35.58      | 01/09/2012 | 19:00:20 |
| 8  | Low Outlet Pressure Reading      | 38.8       | 01/09/2012 | 18:55:22 |
| 9  | High Flow Reading                | 44.25      | 01/09/2012 | 18:55:21 |
| 10   | High Flow Reading                | 43.45      | 01/09/2012 | 18:52:31 |
| 11   | High Flow Reading                | 43.44      | 01/09/2012 | 18:52:27 |
| 12   | High Flow Reading                | 43.41      | 01/09/2012 | 18:52:25 |
| 13   | High Flow Reading                | 43.27      | 01/09/2012 | 18:52:17 |
| 14   | High Flow Reading                | 43.14      | 01/09/2012 | 18:52:13 |
| 15   | High Flow Reading                | 43.03      | 01/09/2012 | 18:52:11 |
| 16   | High Flow Reading                | 39.79      | 01/09/2012 | 18:52:07 |
| 17   | High Flow Reading                | 28.10      | 01/09/2012 | 18:50:44 |
| 18   | High Outlet Pressure Reading     | 87.4       | 01/09/2012 | 18:50:43 |





1 of 7

- Click on the column headings to sort data according to that column.
- Click the Arrow Buttons to navigate through all the event log pages.

## 8.19 Using the Firmware Screen

Displays the current firmware version and date of the P1500W2 Series Air Dryers.

The screenshot shows a web-based interface for the P1500W2 Series Air Dryers. At the top, there is a navigation bar with five tabs: [Status](#), [Config](#), [Event](#), [Alarm](#), and [Firmware](#). The [Firmware](#) tab is currently selected. Below the navigation bar, the main content area displays the following information:

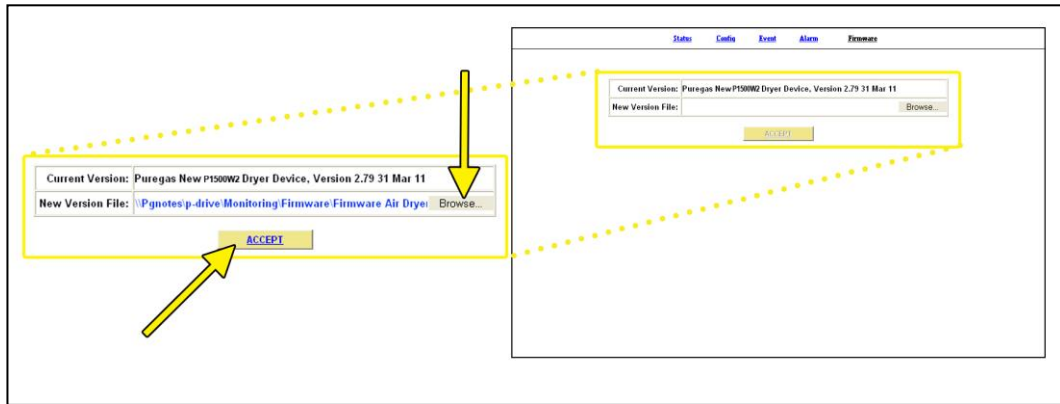
|                   |                                       |                           |
|-------------------|---------------------------------------|---------------------------|
| Current Version:  | P1500W2 Dryer, Version 2.79 16 May 11 |                           |
| New Version File: | <input type="text"/>                  | <a href="#">Browse...</a> |

Below the table, there is a yellow button labeled **ACCEPT**.

- **Current Version:** Displays the current firmware version of the P1500W2 Air Dryer.
- **New Version File:** Displays the new location and new firmware version chosen.
- The **BROWSE** Button allows you to locate the new firmware file.
- The **ACCEPT** Button is used to change values.
- Keyword validation is required to update firmware.

### 8.19.1 Updating the Firmware:

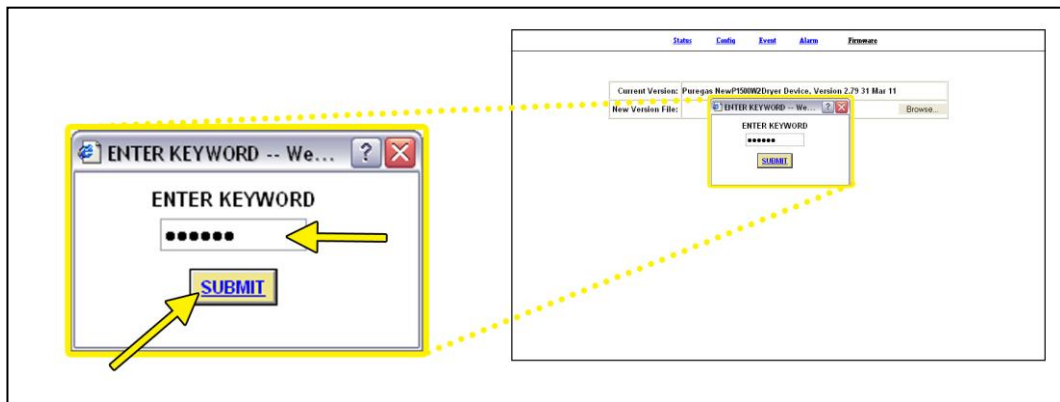
#### 8.19.1.1 Click on **BROWSE** Button to locate the firmware file.



#### 8.19.1.2 Navigate and select the correct .bin file. Press the **OK** Button.

#### 8.19.1.3 Click the **ACCEPT** Button.

#### 8.19.1.4 Enter Keyword (default is 123456)



#### 8.19.1.5 Click on **SUBMIT** Button when done. This will lock in the new firmware version.

## 8.20 Connecting via SNMP

Using SNMP to connect and communicate with the P1500W2 Series Air Dryer is dependent upon the specific SNMP Management software used on your network. This software requires a SNMP Definition & Configuration File (MIB file) in order to properly communicate with the Air Dryer.

The files for the P1500W Series Air Dryers can be downloaded from our website (Puregas.com) under the Product Support section SNMP Files link. It is necessary to import this file into your SNMP operating software.

**NOTE:** Reference Appendix section 14.3 for a list of SNMP Parameters including Limits, Defaults, and Formats.



## 9. Testing Your Dryer

### 9.1 Safety & Warning Information



#### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** Many procedures performed during installation, operation, testing, and maintenance of this air dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



#### **WARNING!**

**Internal surfaces may be hot.** Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.



#### **CAUTION!**

Depressurizing the air dryer may be necessary before performing certain procedures. **NEVER** remove pressure sensing tubes from the control board without depressurizing the air dryer first, or **damage to the control board will occur.**

## 9.2 Measuring Compressor Amp Draw



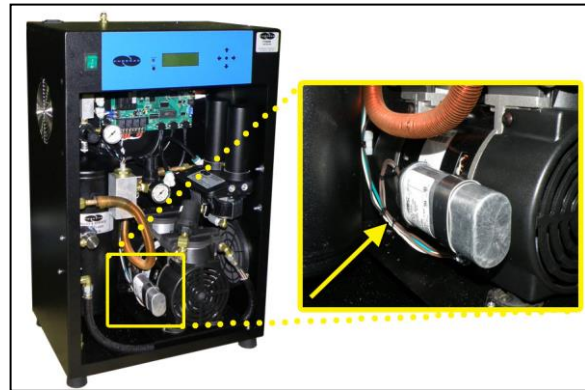
### **WARNING!**

**Internal surfaces may be hot.** Use care when coming into contact with internal components as there is a potential for some these components to become hot when in operation or standby.

**With the Compressor running:**

**9.2.1** Open Front Panel (section 8.7 ).

**9.2.2** Locate wire #5 coming directly from the Compressor.



**9.2.3** Use an Amp Meter to measure the running amps. With the Compressor running, the running amps should measure:

- **6.3 amps or below** for the P1500W2, P1500W2LP & P1500W2HP models
- **3.2 or below** for the P1502W2, P1502W2LP & P1502W2HP models



**9.2.4** Close Front Panel.

*If the Compressor measures over running amps indicated above, see section 13.16 for troubleshooting information.*

### 9.3 Measuring Compressor Voltage



#### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** It is highly recommended that you remove all jewelry before performing any procedures.

**9.3.1** Power the air dryer **OFF** (section 8.3 ).

**9.3.2** Open Front Panel (section 8.7 ).

**9.3.3** Depressurize the air dryer (section 8.8 ).

**9.3.4** Locate wire #5 at the solid state relay and wire #6 on Control Board.

**9.3.5** Lift plastic cover on Control Board over wire #6.

**9.3.6** Power the air dryer ON (section 8.3 ).

**9.3.7** Use a Voltmeter to measure the voltage:

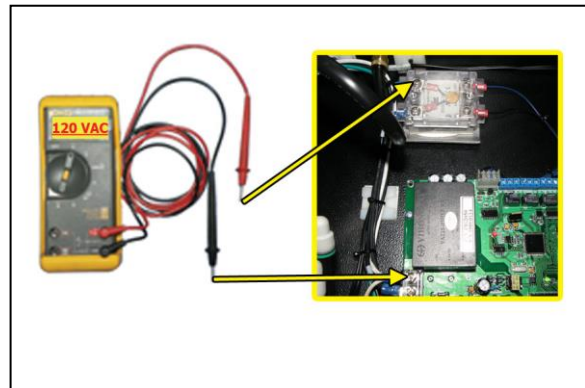
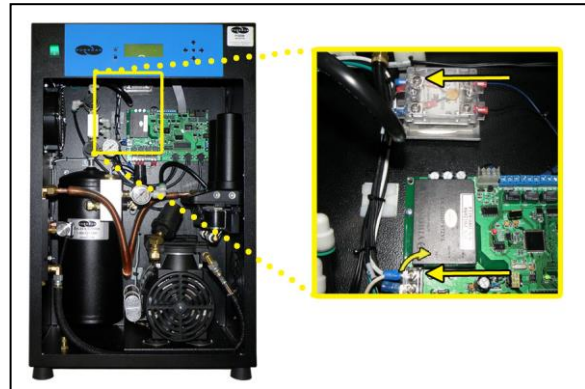
**9.3.7.1** Place the probes over terminals for wire #5 and wire #6.

The voltage should measure:

- **110 - 125 VAC** for the P1500W2, P1500W2LP & P1500W2HP models
- **208 - 230 VAC** for the P1502W2, P1502W2LP & P1502W2HP models

**9.3.8** Close plastic cover on Control Board over wire #6.

**9.3.9** Close Front Panel.



## 9.4 Measuring Incoming Voltage

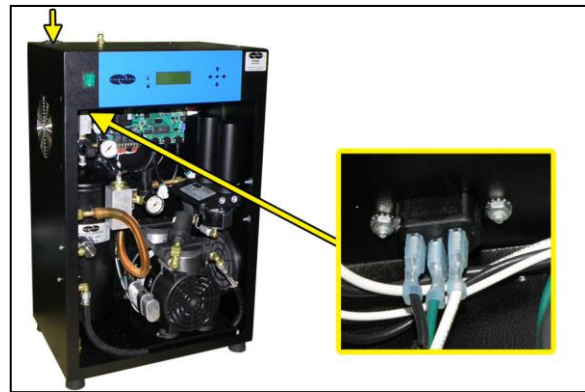


### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** It is highly recommended that you remove all jewelry before performing any procedures.

**9.4.1** Open Front Panel (section 8.7 ).

**9.4.2** Locate the Incoming **POWER** connector inside the dryer.



**9.4.3** Use a Voltmeter to measure the voltage (inside dryer):

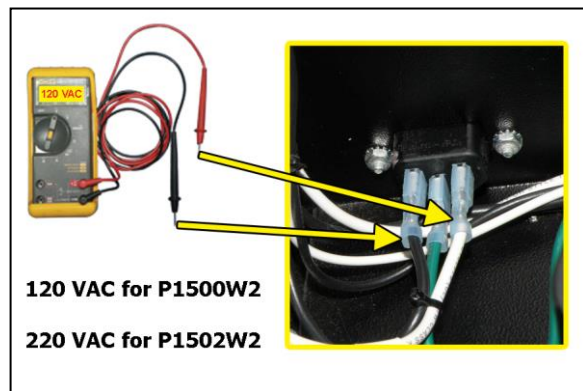
**9.4.3.1** Place the probes between the Power Connector and terminal insulation so that they touch the metal contacts for BLACK (BROWN) wire and WHITE (BLUE) wire.

The voltage should measure:

- **110 - 125 VAC** for the P1500W2, P1500W2LP & P1500W2HP models
- **208 - 230 VAC** for the P1502W2, P1502W2LP & P1502W2HP models

**9.4.4** Close Front Panel.

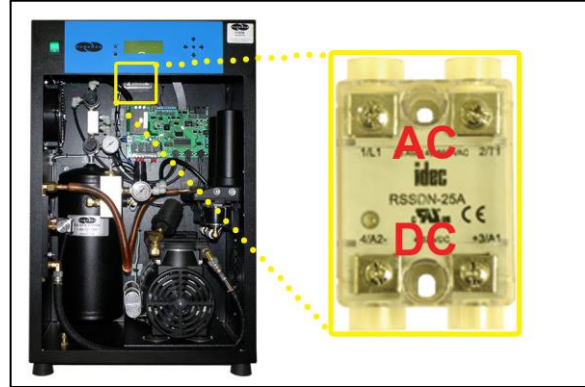
*If the incoming voltage measures less than indicated above, it is recommended that steps be taken at your facility to bring the power to the recommended level of voltage.*



## 9.5 Measuring Voltages at Solid State Relay

**9.5.1** Open Front Panel (section 8.7 ).

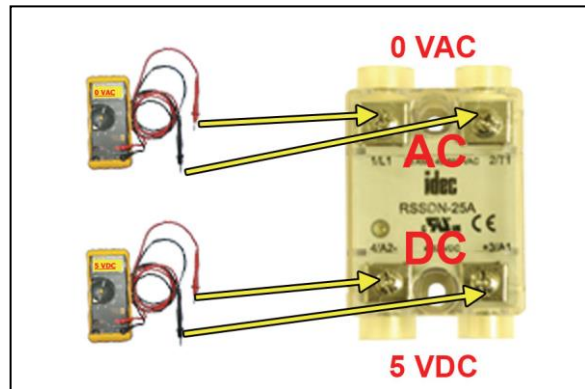
**9.5.2** Locate the Solid State Relay inside the Dryer at the top of back wall.



**With the Compressor running:**

**9.5.3** Use a Voltmeter to measure across the AC terminals.  
Should measure **0 VAC**.

**9.5.4** Use a Voltmeter to measure across the DC terminals.



Should measure:

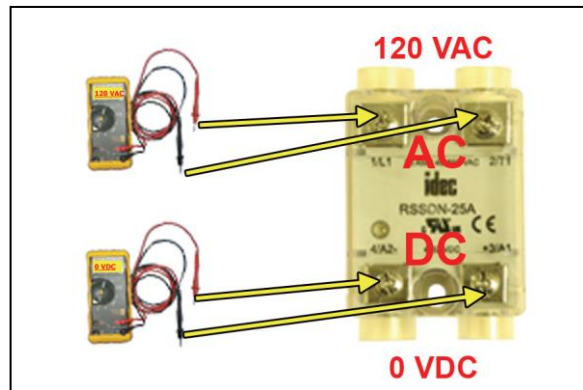
- **5 VDC** for the P1500W2, P1500W2LP & P1500W2HP models
- **12 VDC** for the P1502W2, P1502W2LP & P1502W2HP models

**With the Compressor NOT running:**

**9.5.5** Use a Voltmeter to measure across the AC terminals.

Should measure:

- **110 - 125 VAC** for the P1500W2, P1500W2LP & P1500W2HP models
- **208 - 230 VAC** for the P1502W2, P1502W2LP & P1502W2HP models



**9.5.6** Use a Voltmeter to measure across the DC terminals.

Should measure **0 VDC**.

**9.5.7** Close Front Panel.

*If any of the AC voltage measurements are different than indicated above, the Solid State Relay is defective and should be replaced.*

*If any of the DC voltage measurements are different than indicated above, the Control Board may be defective and should be replaced.*

*See sections 11.1 for part detail and 11.5 for ordering information.*



## 9.6 Testing Consistent Heatless Dryer Cycling



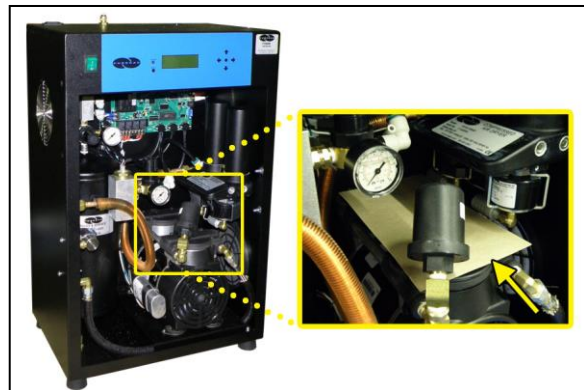
### **WARNING!**

**Internal surfaces may be hot.** Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.

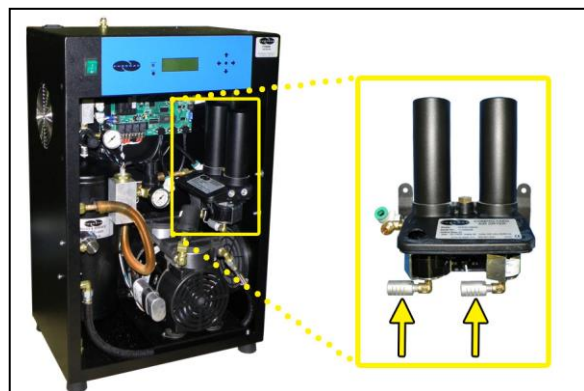
**With the Compressor running:**

**9.6.1** Open Front Panel (section 8.7 ).

**9.6.2** Place a piece of insulating material over the Compressor for this test (*i.e. piece of cardboard*).



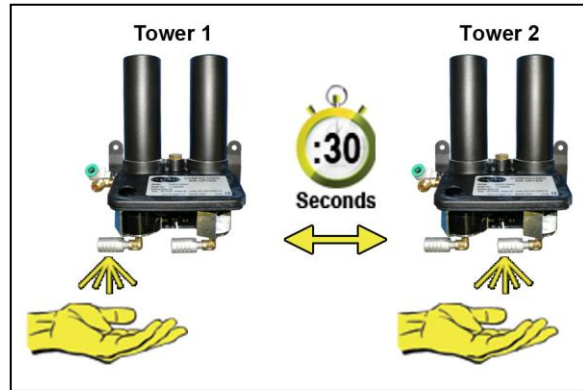
**9.6.3** Locate the heatless dryer purge solenoids inside the air dryer.





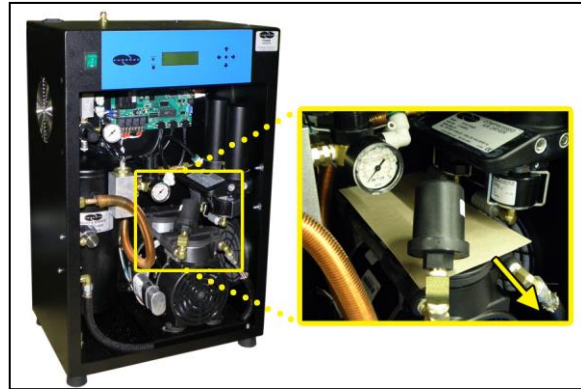
**9.6.4** Place your hand beneath the purge solenoids to feel for purging air. Air should:

- Purge from Tower 1 side
- Purge from Tower 2 side
- **30 Seconds** later
- Purge from Tower 1 side
- **30 Seconds** later
- ...and so on.



**9.6.5** Remove insulating material from top of the Compressor.

**9.6.6** Close Front Panel.



*If the Heatless Dryer is not cycling consistently as described, see section 13.13 for troubleshooting information.*

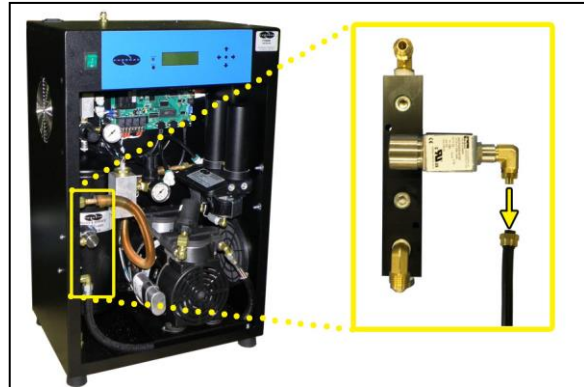
## 9.7 Testing Unloader Valve

**With the Compressor running:**

**9.7.1** Open Front Panel (section 8.7 ).

**9.7.2** Locate the Unloader Valve on the left side of the Dryer.

**9.7.3** With a 9/16" wrench disconnect hose from the Unloader Valve.



**9.7.4** Place your hand under the Unloader Valve to verify for air flow.

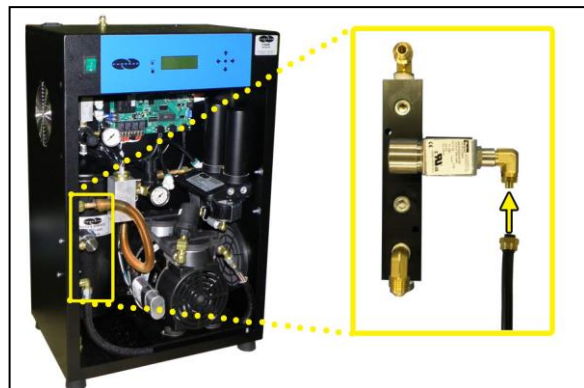
The Unloader Valve should purge all the head pressure when the Compressor turns off, and for approximately 2 seconds when the Compressor starts up again.



*If air flows from this valve continuously the Unloader Valve is defective and should be replaced. See sections 11.2 for part detail and 11.5 for ordering information.*

**9.7.5** With a 9/16" wrench connect hose to the Unloader Valve.

**9.7.6** Close Front Panel.



## 9.8 Measuring Heatless Dryer Solenoid Voltage

**With the Compressor running:**

**9.8.1** Open Front Panel (section 8.7 ).

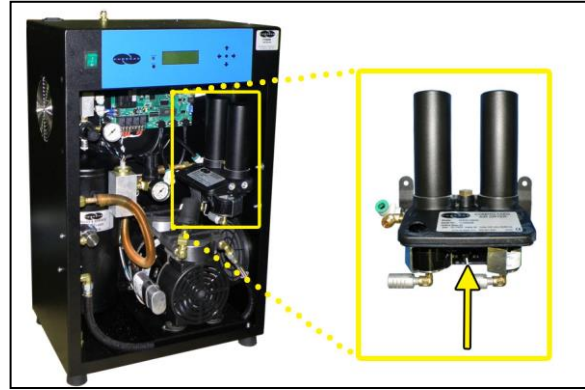
**9.8.2** Locate the Heatless Dryer Cycle Timer.

The timer has three (3) sets of terminals (from left-to-right):

“**VALVE**” – Left solenoid

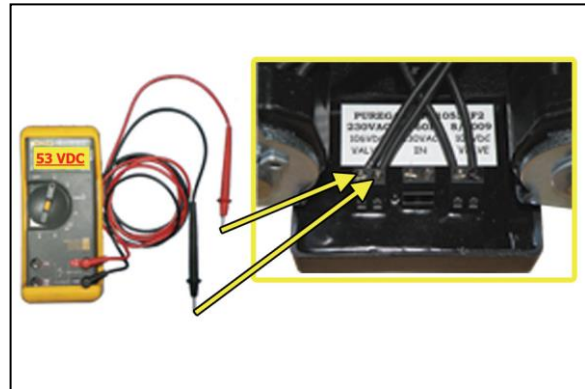
“**IN**” – Incoming power

“**VALVE**” – Right solenoid



**9.8.3** Use a Voltmeter to measure the DC voltage across each set of “**VALVE**” terminals.

Continue to measure for up to 45 seconds if no voltage is initially measured.



The voltage should measure:

- **53 VDC** for the P1500W2, P1500W2LP & P1500W2HP models
- **106 VDC** for the P1502W2, P1502W2LP & P1502W2HP models

**9.8.4** Close Front Panel.

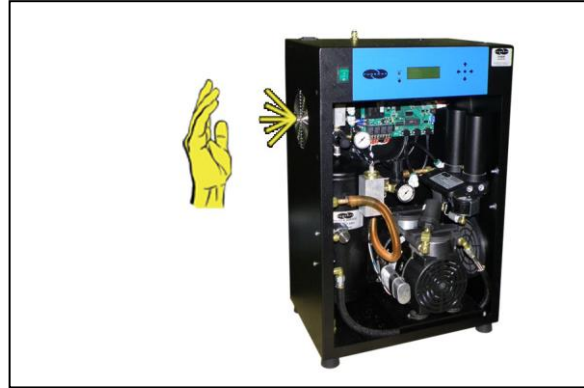
*If the voltage does not measure as indicated above, this is an indication that the Cycle Timer is defective and should be replaced. See sections 11.3 for part detail and 11.5 for ordering information.*

## 9.9 Testing Air Dryer Fan

**NOTE:** To test the fan, the cabinet temperature must be above 32° C.

**9.9.1** Place your hand outside the dryer to feel for air being blown outwards.

**NOTE:** The fan will turn OFF when the cabinet temperature is below 27° C.



*If the fan is not blowing air outwards as described:*

- *Verify the cabinet temperature is above 32° C.*
- *Check for loose wiring. Refer to the Wiring Diagram (section 14.1 )*
- *Replace defective fan (see sections 11.1 for part detail and 11.5 for ordering information).*
- *Replace defective Control Board if fan does not respond properly to temperature changes (see sections 11.2 for part detail and 11.5 for ordering information).*

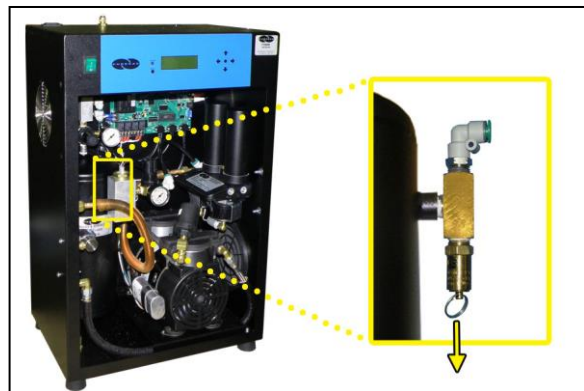
## 9.10 Testing Safety Relief Valve

**9.10.1** Open Front Panel (section 8.7 ).

**9.10.2** Pull the ring handle on the Safety Relief Valve to verify air pressure is released.

**9.10.3** Release ring handle and verify that no air is leaking from the valve.

**9.10.4** Close Front Panel.



*If the Safety Relief Valve fails either test described, it must be replaced. See sections 11.2 for part detail and 11.5 for ordering information.*

## 9.11 Testing Compressor ON/OFF Cycling

**9.11.1** Open Front Panel (section 8.7 ).

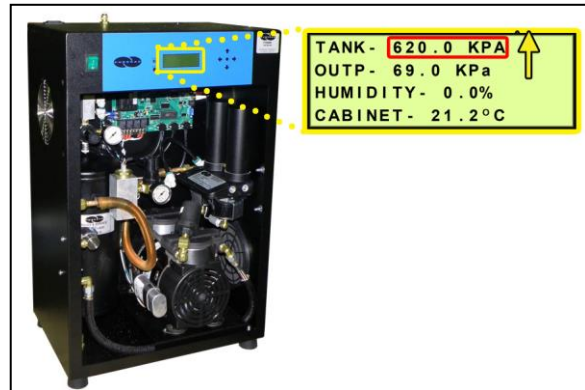
**9.11.2** When the Unit Screen (8.4.5.1 ) appears on the display, press the **HOLD Button** on the Front Panel to freeze that screen.



**With Compressor running:**

**9.11.3** Verify the Compressor shuts down when the tank pressure (**TANK**) reaches **620 kPa**.

*If the tank pressure (**TANK**) fails to reach 620 kPa, see section 13.15 for troubleshooting information.*

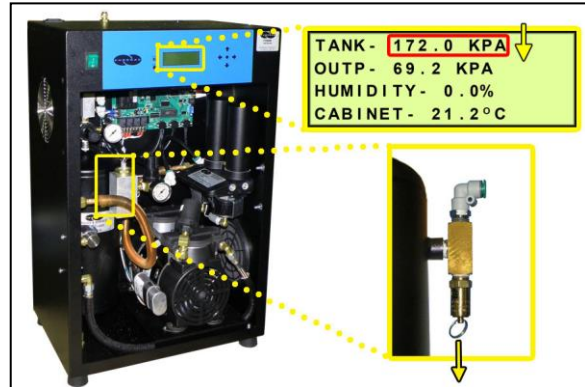


**With Compressor NOT running:**

**9.11.4** Pull the ring handle on the Safety Relief Valve to release air pressure from the air tank.

Verify the Compressor turns on when the tank pressure (**TANK**) falls to:

- **172 kPa\*** for the P1500W2, P1500W2LP, P1502W2 & P1502W2LP models (\*345 kPa for Dryers using Firmware v2.84 and older)
- **414 kPa** for the P1500W2HP & P1502W2HP models



### 9.11.5 Close Front Panel

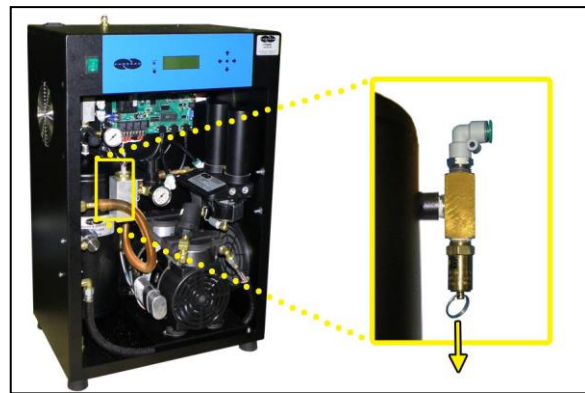
*If the Compressor Cycling fails either test described, it indicates a problem with the Control Board which will need to be replaced. See sections 11.2 for part detail and 11.5 for ordering information.*

## 9.12 Testing High Duty Cycle Alarm

### 9.12.1 Open Front Panel (section 8.7 ).

### 9.12.2 Allow the Compressor to run and then turn off.

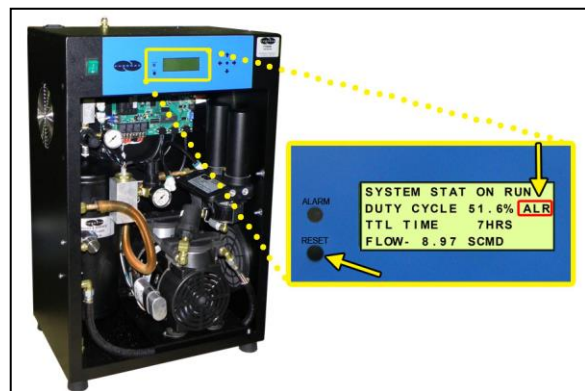
**9.12.3** Immediately after the Compressor turns off, pull the ring handle on the Safety Relief Valve until the Compressor starts running again.



A High Duty Cycle alarm should appear on the System Screen.

### 9.12.4 Press the **RESET** Button.

### 9.12.5 Close Front Panel.



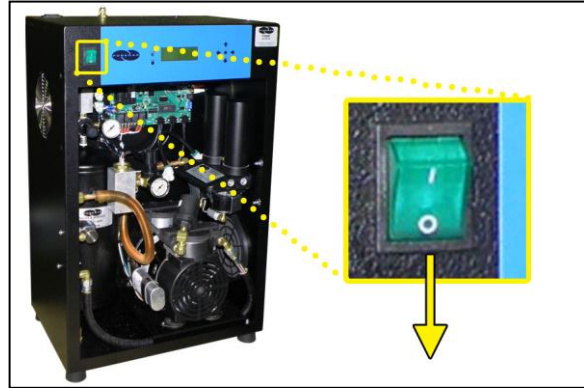
*If you are unable to create a High Duty Cycle alarm as described, see section 13.18 for troubleshooting information.*



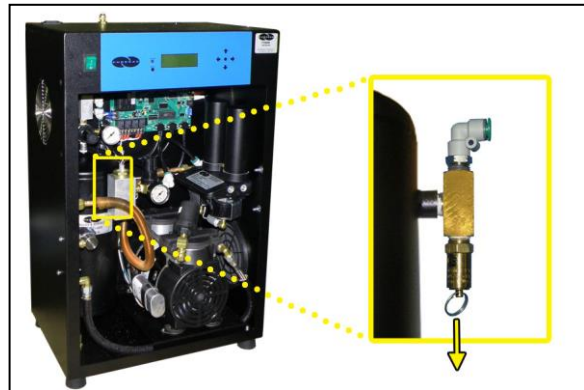
## 9.13 Testing Humidity Alarm and System Shutdown

**9.13.1** Power the air dryer **OFF**.

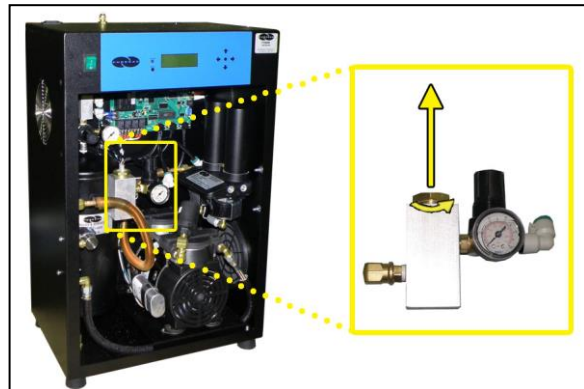
**9.13.2** Open Front Panel (section 8.7 ).



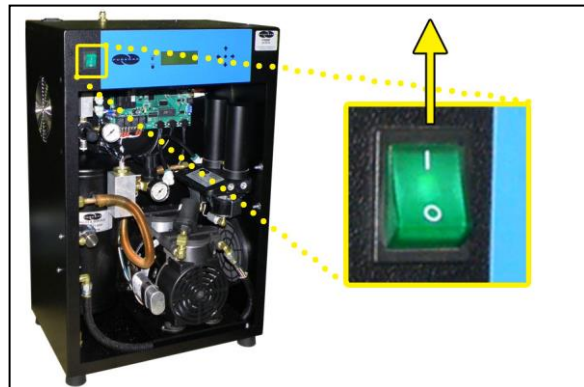
**9.13.3** Depressurize the air dryer.



**9.13.4** Unscrew and remove the Humidity Sensor from the Humidity Block.



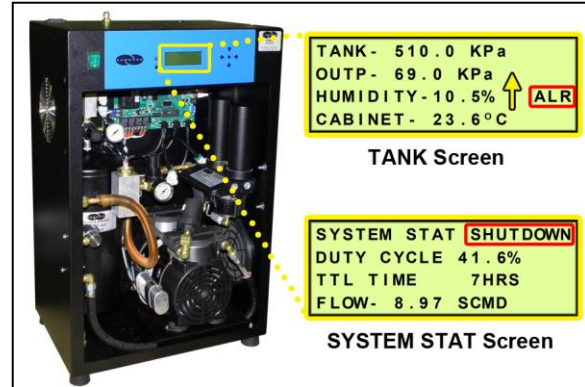
**9.13.5** Power the air dryer **ON**.



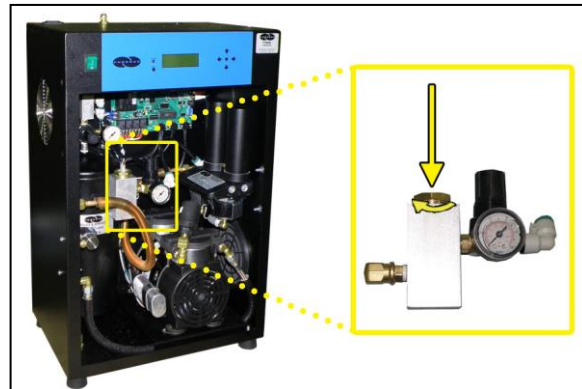


- 9.13.6** Allow the Humidity reading to rise over 10.0%

After three (3) minutes, verify that a Humidity Alarm appears and the dryer goes into **SHUTDOWN** mode.

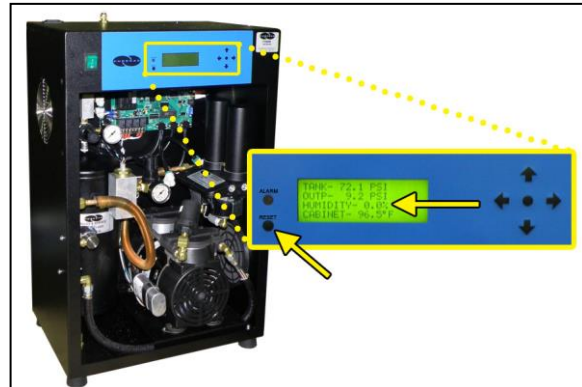


- 9.13.7** Replace the Humidity Sensor into the Humidity Block.



- 9.13.8** Press the **RESET Button** to clear the Humidity alarm.

- 9.13.9** Close Front Panel.

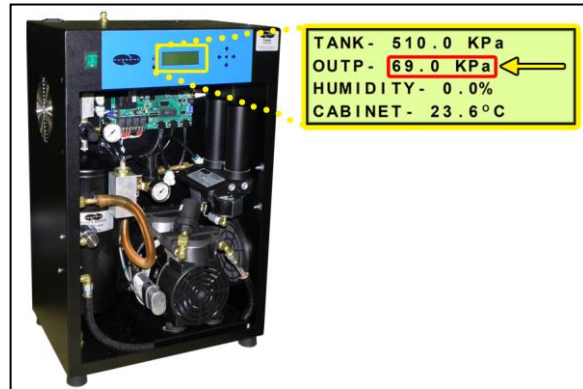


*If you are unable to create a Humidity / Shutdown alarm as described, see section 13.10 for troubleshooting information.*

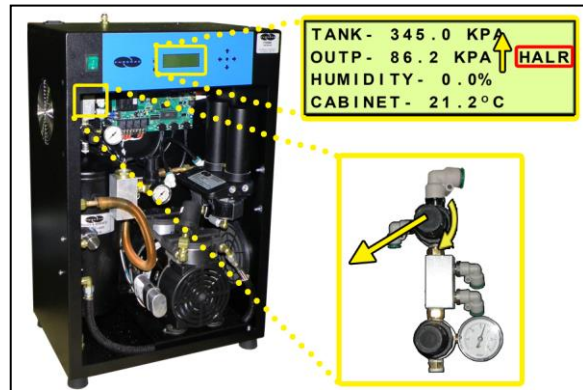
## 9.14 Testing High Outlet Pressure Alarm

**9.14.1** Make a note of the current Outlet Pressure (**OUTP**) reading.

**9.14.2** Open Front Panel (section 8.7 ).



**9.14.3** Pull the Outlet Pressure Regulator knob out (or loosen the retaining nut – LP Models).

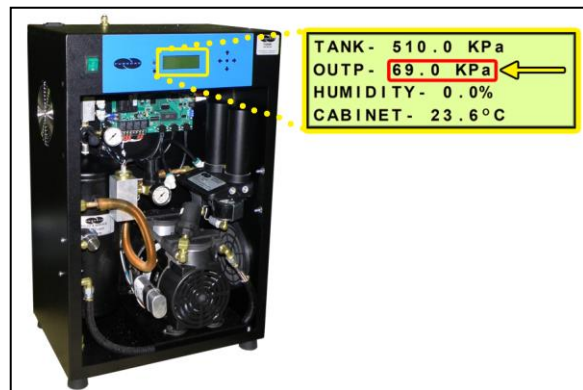


**9.14.4** Turn knob clockwise until Outlet Pressure (**OUTP**) reading climbs **over**:

- **83 kPa** for P1500W2 & P1502W2 models
- **51.71 kPa** for P1500W2LP & P1502W2LP models
- **241 kPa** for P1500W2HP & P1502WHP models

After one (1) minute, the High Pressure Alarm should appear on the display.

**9.14.5** Turn Outlet Pressure Regulator knob counter-clockwise until Outlet Pressure (**OUTP**) reading lowers to the reading recorded in step 9.14.1



**9.14.6** Push knob in to lock (or tighten the retaining nut – LP Models).

**9.14.7** Press the **RESET Button**.

**9.14.8** Close Front Panel.

*If you are unable to create a High Outlet Pressure Alarm as described, see section 13.6 for troubleshooting information.*

## 9.15 Testing Low Outlet Pressure Alarm

**9.15.1** Make a note of the current Outlet Pressure (**OUTP**) reading.

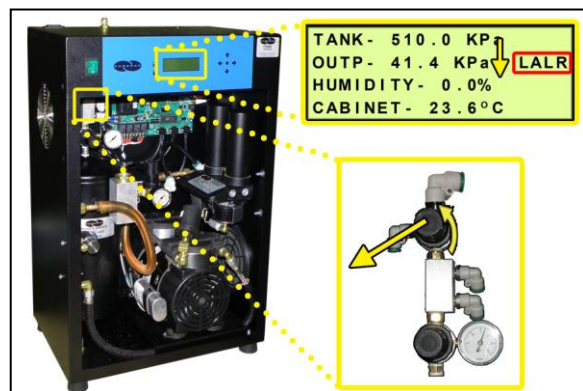
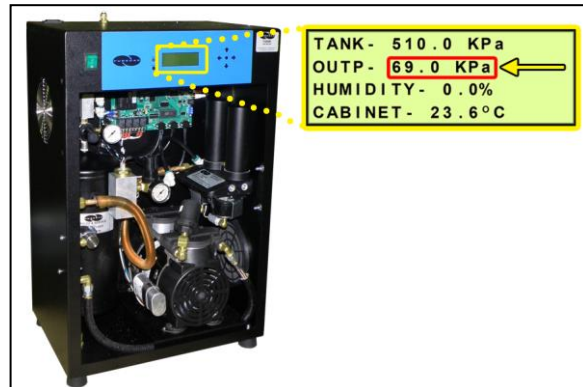
**9.15.2** Open Front Panel (section 8.7 ).

**9.15.3** Pull the Outlet Pressure Regulator knob out (or loosen the retaining nut – LP Models).

**9.15.4** Turn knob counter-clockwise until Outlet Pressure (**OUTP**) reading drops **below**:

- **45 kPa** for P1500W2 & P1502W2 models
- **2.07 kPa** for P1500W2LP & P1502W2LP models
- **172 kPa** for P1500W2HP & P1502WHP models

After one (1) minute, the Low Pressure Alarm should appear on the display.



**9.15.5 Turn Outlet Pressure**

Regulator knob clockwise  
until Outlet Pressure (**OUTP**)  
reading rises to the reading  
recorded in step 9.15.1



**9.15.6** Push knob in to lock (or tighten the retaining nut – LP Models).

**9.15.7** Press the **RESET Button**.

**9.15.8** Close Front Panel.

*If you are unable to create a Low Outlet Pressure Alarm as described, see section 13.8 for troubleshooting information.*

## 9.16 Testing Air Fittings & Hoses for Leaks

**NOTE:** This is a general procedure that can be applied to any fitting or hose that has air pressure in it. **DO NOT SOAP TEST THE HUMIDITY SENSOR FITTING. DAMAGE TO THE SENSOR MAY OCCUR.**

**With Compressor NOT running:**

**9.16.1** Listen for any 'hissing' sounds which may indicate a fitting or hose air leak.

**With Compressor running:**

**9.16.2** Use a 1-inch paint brush to dab soapy water on the air fitting or hose connection to be tested.

If air bubbles appear at the connection, this indicates that air is leaking from the connection.



*If any leaks are detected, take steps to seal them off (as necessary):*

- *Tighten the fitting*
- *Re-connect the hose end*
- *Replace the fitting / hose / component*

## 10. Maintaining Your Dryer

In order to ensure that your P1500W2 Series Air Dryer continues to operate efficiently and reliably, PUREGAS recommends performing the following maintenance procedures at the specified Six Month and 8,000 Hour intervals.

It is also recommended that you print out the included *Six Month Maintenance (section 10.2 )* and *8,000 Hour Maintenance (section 10.3 )* log sheets and record all completed maintenance for historical tracking and reference purposes.

The log sheets include a Section reference column which indicates the User's Guide section containing the information about the specific procedure. Please refer to these sections for detailed procedural information.

**NOTE:** When operating at higher ambient temperatures, it is recommended that maintenance be performed more frequently.

**NOTE:** After 16,000 hours of run time, PUREGAS recommends sending in your Compressors and heatless dryers for a complete and comprehensive rebuild by our Service Department technicians. *See sections 12.1 and 12.2 for information on services and contacting PUREGAS.*

### 10.1 Safety & Warning Information



#### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** Many procedures performed during installation, operation, testing, and maintenance of this air dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.

**WARNING!**

**Internal surfaces may be hot.** Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.

**CAUTION!**

**SHUT DOWN IMMEDIATELY FOR REPAIRS** if the air Compressor shows any evidence of overheating or presents excessive noise.

**CAUTION!**

Depressurizing the air dryer may be necessary before performing certain procedures. **NEVER** remove pressure sensing tubes from the Control Board without depressurizing the air dryer first, or **damage to the Control Board will occur.**

**IMPORTANT!**

Performing routine maintenance as outlined in the *Maintaining Your Dryer* section will ensure optimal performance over the lifecycle of your air dryer.

**IMPORTANT!**

Performing procedures not described in this User's Guide or installing components not supplied by PUREGAS is **NOT RECOMMENDED AND MAY VOID THE WARRANTY.**

**IMPORTANT!**

After performing any maintenance, always soap test pressure fittings to check for air leaks. Also, check for any loose or disconnected wiring.



## 10.2 Six Month Maintenance

MODEL: \_\_\_\_\_

LOCATION NAME: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

DATE INSTALLED: \_\_\_\_\_

| Procedure  | Section     | Maintenance Interval (Months) |                          |                          |                          |                          |
|--|-------------|-------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|  |             | 6                             | 12                       | 18                       | 24                       | 30                       |
| Install Six Month Maintenance Kit <b>P011910</b>   | 11.4        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Read & Record Flow Rate ( <b>FLOW</b> )  | 8.4.5.2     |                               |                          |                          |                          |                          |
| Measure & Record<br>Compressor Amp Draw  | 9.2         |                               |                          |                          |                          |                          |
| Measure & Record Incoming Voltage:<br><ul style="list-style-type: none"> <li><b>110 - 125 VAC</b> for P1500W2, P1500W2LP &amp; P1500W2HP models</li> <li><b>208 - 230 VAC</b> for P1502W2, P1502W2LP &amp; P1502W2HP models</li> </ul> | 9.4         |                               |                          |                          |                          |                          |
| Set System Pressure:<br><ul style="list-style-type: none"> <li><b>552 kPa</b> for P1500W2, P1500W2LP, P1502W2 &amp; P1502W2LP models</li> <li><b>621 kPa</b> for P1500W2HP &amp; P1502W2HP models</li> </ul>                           | 8.9         | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Set Static Pressure:<br><ul style="list-style-type: none"> <li><b>117 kPa</b> for P1500W2, P1500W2LP, P1502W2 &amp; P1502W2LP models</li> <li><b>414 kPa</b> for P1500W2HP &amp; P1502W2HP models</li> </ul>                           | 8.10        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Set Outlet Pressure  | 8.11        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test Consistent Heatless Dryer Cycling   | 9.6         | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test Fan   | 9.9         | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test Compressor ON/OFF Cycling   | 9.11        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test High Duty Cycle Alarm   | 9.12        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test Humidity Alarm & System Shutdown  | 9.13        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test High & Low Outlet Pressure Alarms   | 9.14 & 9.15 | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test Air Fittings for Leaks  | 9.16        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Visually Inspect Inside & Outside of Unit for Loose Wiring or Hardware   |             | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Maintenance Performed by:  |             |                               |                          |                          |                          |                          |
| Date of Maintenance:   |             |                               |                          |                          |                          |                          |

**NOTE: COPY OR PRINT THIS PAGE AND KEEP IT WITH THE AIR DRYER**



### 10.3 8,000 Hour Maintenance

Under typical operating conditions:

8,000 hours of run time will occur between one (1) and two (2) years of use.

This will be identified by a **TTL TIME** Alarm on the display.

MODEL: \_\_\_\_\_

LOCATION NAME: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

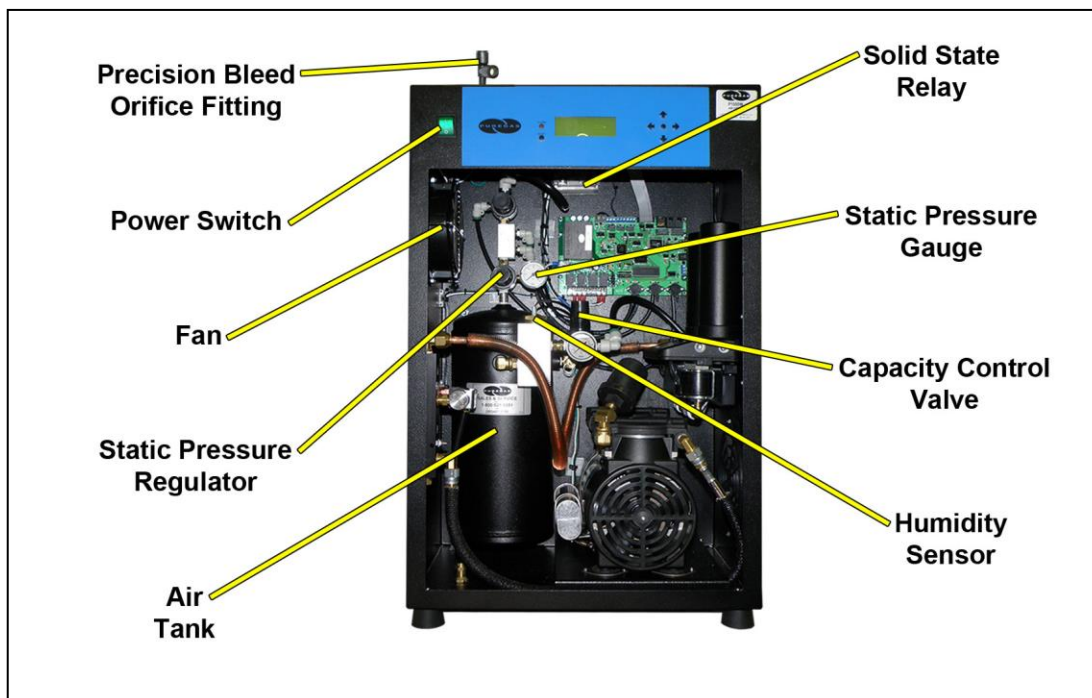
DATE INSTALLED: \_\_\_\_\_

| Procedure  | Section | Maintenance Interval (Hours) |                          |                          |                          |                          |
|--|---------|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|  |         | 8,000                        | 16,000                   | 24,000                   | 32,000                   | 40,000                   |
| Install 8,000 Hour Maintenance Kit <b>P012252</b>  | 11.4    | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Read & Record Flow Rate ( <b>FLOW</b> )  | 8.4.5.2 |                              |                          |                          |                          |                          |
| Measure & Record<br>Compressor Amp Draw  | 9.2     |                              |                          |                          |                          |                          |
| Set System Pressure:<br><ul style="list-style-type: none"> <li><b>552 kPa</b> for P1500W2, P1500W2LP, P1502W2 &amp; P1502W2LP models</li> <li><b>621 kPa</b> for P1500W2HP &amp; P1502W2HP models</li> </ul> | 8.9     | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Set Static Pressure:<br><ul style="list-style-type: none"> <li><b>117 kPa</b> for P1500W2, P1500W2LP, P1502W2 &amp; P1502W2LP models</li> <li><b>414 kPa</b> for P1500W2HP &amp; P1502W2HP models</li> </ul> | 8.10    | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Set Outlet Pressure  | 8.11    | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test Consistent Heatless Dryer Cycling   | 9.6     | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test Compressor ON/OFF Cycling   | 9.11    | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Test Air Fittings for Leaks  | 9.16    | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Reset TTL TIME Reading to Zero   | 8.6.6   | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Visually Inspect Inside & Outside of Unit for Loose Wiring or Hardware   |         | <input type="checkbox"/>     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Maintenance Performed by:  |         |                              |                          |                          |                          |                          |
| Date of Maintenance:   |         |                              |                          |                          |                          |                          |

**NOTE: COPY OR PRINT THIS PAGE AND KEEP IT WITH THE AIR DRYER**

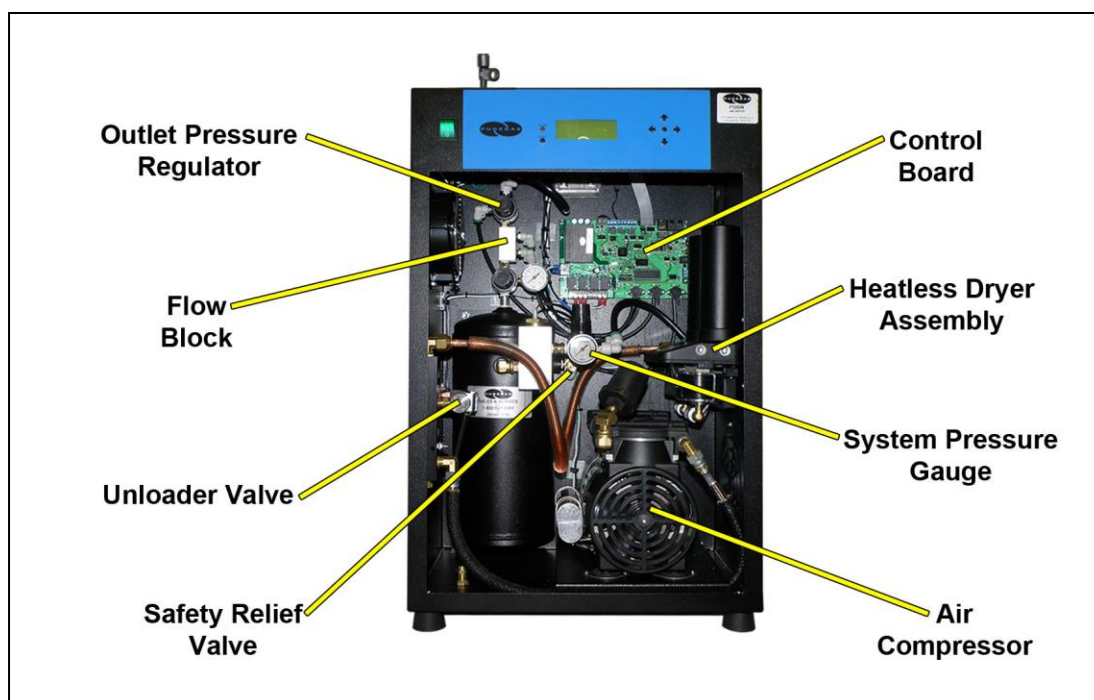
## 11. Replacement Parts & Accessories

### 11.1 Dryer Parts



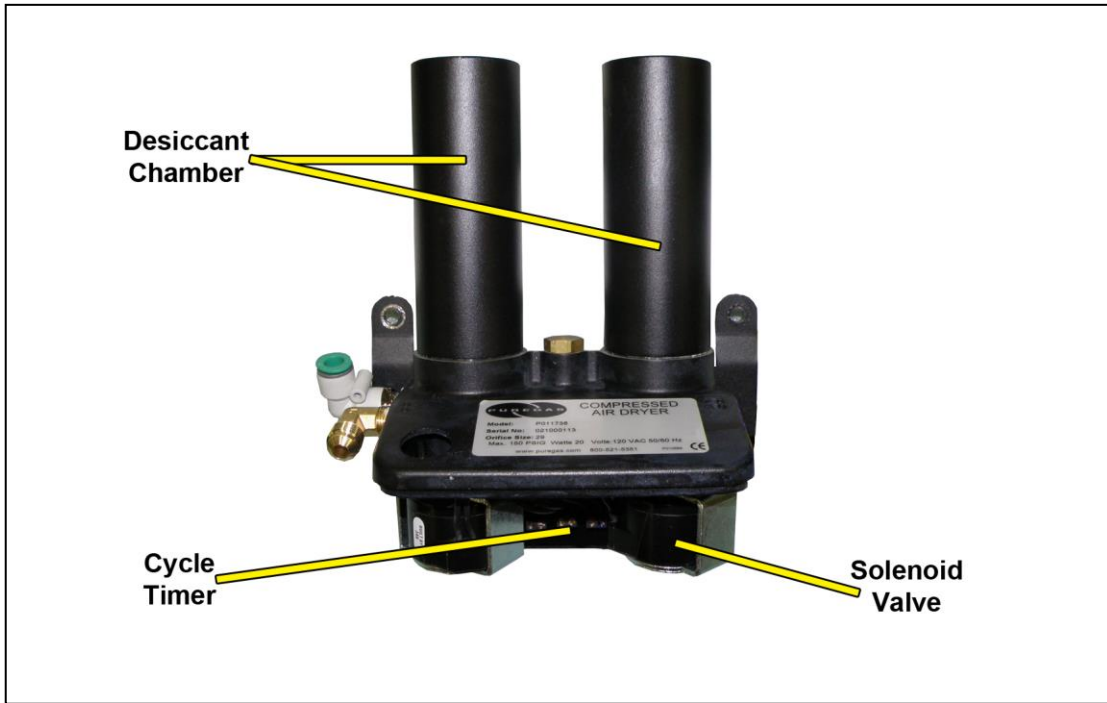
| Description  | Part Number                            | Quantity | Recommend Spare |
|--|--|----------|-----------------|
| Precision Bleed Orifice Fitting                                | P013349                                | 1        |                 |
| Power Switch   | M038428                                | 1        |                 |
| Fan -<br>P1500W2 Series (1120VAC)<br>P1502W2 Series (220 VAC)  | P4080<br>P040801                       | 1        |                 |
| Static Pressure Regulator -<br>W2 & W2LP models<br>W2HP models | P010279<br>P010622                     | 1        |                 |
| Air Tank   |  | 1        |                 |
| Solid State Relay  | P05992                                 | 1        | ✓ (1)           |
| Static Pressure Gauge -<br>W2 & W2LP models<br>W2HP models     | P8345<br>P3197                         | 1        |                 |
| Capacity Control Valve   | P010492                                | 1        | ✓ (1)           |
| Humidity Sensor  | <i>In Kit P011910 See section 11.4</i> |          |                 |

## 11.2 Dryer Parts cont.









| Description   | Part Number                         | Quantity | Recommend Spare |
|---|-------------------------------------|----------|-----------------|
| Outlet Pressure Regulator –<br><b>W2</b> models<br><b>W2LP</b> models<br><b>W2HP</b> models | P010279<br>P012316<br>P010622       | 1        |                 |
| Flow Block  |                                     | 1        |                 |
| Unloader Valve -<br><b>P1500W2</b> Series (110 VAC)<br><b>P1502W2</b> Series (220 VAC)      | P011022<br>P010453                  | 1        |                 |
| Safety Relief Valve   | P011777                             | 1        |                 |
| Control Board –<br><b>W2</b> models<br><b>W2LP</b> models<br><b>W2HP</b> models             | P011892<br>P012395<br>P013417       | 1        | ✓ (1)           |
| Heatless Dryer Assembly   | <i>See section 11.3 for detail.</i> |          |                 |
| System Pressure Gauge   | P010695                             | 1        |                 |
| Air Compressor –<br><b>P1500W2</b> Series (110 VAC)<br><b>P1502W2</b> Series (220 VAC)      | P011781<br>P011873                  | 1        | ✓ (1)           |

### 11.3 Heatless Dryer Assembly Parts



| Description  | Part Number   | Quantity | Recommend Spare |
|--|---|----------|-----------------|
| Heatless Dryer -<br><b>P1500W</b> Series (110 VAC)<br><b>P1502W</b> Series (220 VAC) | PHF2C106023<br>PHF2C20623                           | 1        |                 |
| Desiccant Chamber  | P2004036  | 2        |                 |
| Cycle Timer -<br><b>P1500W</b> Series (110 VAC)<br><b>P1502W</b> Series (220 VAC)    | P010530F1<br>P010530F2                              | 1        |                 |
| Solenoid Valve Kit   | <i>In Kit P012252. See section 11.4 for detail.</i> |          |                 |

## 11.4 Accessories for Your Dryer

|   | Description  | Part Number | Recommend Spare |
|---|--|-------------|-----------------|
|    | <b>Six Month Maintenance Kit</b><br>Includes air intake filter, Compressor muffler, and humidity sensor.     | P011910     | ✓ (2)           |
|    | <b>8,000 Hour Maintenance Kit</b><br>Includes heatless dryer maintenance kit and Compressor maintenance kit. | P012252     | ✓ (1)           |
|    | <b>Universal Rack Mounting Kit</b><br>Includes mounting brackets and hardware for 19" or 23" racks.          | P011674     |                 |
|   | <b>Wall Mounting Kit</b><br>Includes mounting brackets and hardware.   | P011773     |                 |
|  | <b>Cycle Kit</b><br>Allows multiple dryers to be cycled.   | P08033W     |                 |
|  | <b>Cycle Kit Interface Kit</b>   | P012341     |                 |

## 11.5 Ordering Parts from PUREGAS



### **IMPORTANT!**

Instruction for the replacement of individual listed components goes beyond the scope of this User's Guide and will not be covered. Please refer to the information included with the specific replacement part for this instruction.

Once you have identified your required parts and accessories, contact the PUREGAS Inside Sales / Service department to order:

(800) 521-5351 (**option 2**)

Fax – (303) 657-2205

[sales@puregas.com](mailto:sales@puregas.com)

[parts@puregas.com](mailto:parts@puregas.com)

## 12. Service & Repair

Only PUREGAS can offer factory direct rebuilds backed by a 6 month factory warranty.

- 2 week turnaround time
- Estimates available upon request
- Minimum service charge fee applies

### 12.1 Services Offered

- **Piston Compressor Rebuild**
  - Replace motor bearings, piston rod assemblies, and install a complete Compressor maintenance kit.
  - Test air flow, air pressure, and electrical performance
- **Heatless Dryer Rebuild**
  - Replace desiccant, o-rings, check valves, springs, and complete solenoid assembly
  - Test proper component operation
- **Desiccant Tower Repack**
  - Clean out tower and replace desiccant, filter, and o-ring
- **Circuit Board Repair** (Limited to current model boards only)
- **Complete Dryer Repair**

### 12.2 Initiating a Service Transaction

- Contact our Parts & Service Department at **1-800-521-5351 (option 3)** to obtain a Return Authorization (RA) number.
- Carefully package the item(s) to be returned.
- Mark the Return Authorization (RA) number on the outside of the shipping container.
- Include the main address and phone number of the individual to contact for related inquiry and follow-up information.
- Include the purchase order number.

## 13. Troubleshooting Your Dryer

### 13.1 Before You Call PUREGAS

**PLEASE READ THIS SECTION FIRST.** It is important that you use the following sections in order to diagnose and attempt to fix the problem with your air dryer before placing a call to PUREGAS Technical Support.

This troubleshooting guide is intended to simplify the isolation of problems, present possible causes, provide test procedures for verification, and suggest corrective actions to restore the air dryer back to normal operation. Each section begins with the most likely cause(s) of the issue. Otherwise, they start from the simplest possibilities and progress to more complicated ones.

This troubleshooting guide is designed to be easy to follow and very effective when used properly. It is suggested to always start at the beginning of the specific problem section and continue in sequence, following the procedures indicated.

### 13.2 Safety & Warning Information



#### **WARNING!**

**For your safety, all the information in this User's Guide must be followed to minimize the risk of electrical shock, and prevent property damage or personal injury.**



#### **WARNING!**

**Internal surfaces may be hot.** Use care when coming into contact with internal components as there is a potential for some of these components to become hot when in operation or standby.





### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** Many procedures performed during installation, operation, testing, and maintenance of this air dryer require the equipment to be running, creating a situation for potential electrical shock. It is highly recommended that you remove all jewelry before performing any procedures.



### **CAUTION!**

Depressurizing the air dryer may be necessary before performing certain procedures. **NEVER** remove pressure sensing tubes from the Control Board without depressurizing the air dryer first, or **damage to the Control Board will occur.**



### **IMPORTANT!**

Performing procedures not described in this User's Guide or installing components not supplied by PUREGAS is **NOT RECOMMENDED AND MAY VOID THE WARRANTY.**



### **CAUTION!**

**Do not test the Humidity Sensor with an ohm meter or apply any DC voltage.** This will render the Humidity Sensor defective.

## 13.3 Air Dryer Won't Power ON

| Possible Cause                             | Check  | Corrective Action   |
|--|--|---|
| <b>POWER</b> Switch in <b>OFF</b> position | Verify <b>POWER</b> switch is in the <b>ON</b> position (section 8.3 ) | Turn <b>POWER</b> switch to the <b>ON</b> position (section 8.3 ) |
| No incoming voltage to air dryer           | Measure incoming voltage (section 9.4 )                                | Troubleshoot facility power supply to air dryer                   |

### 13.4 Display Screen Not Functioning

| Possible Cause                  | Check  | Corrective Action  |
|---------------------------------|--|--|
| Dryer experienced a power spike |  | Power the air dryer <b>OFF</b> for 15+ seconds.<br>Power the air dryer <b>ON</b> . |
| Ribbon cable disconnected       | Verify ribbon cable from the decal is connected at the display board | Reconnect the ribbon cable properly.   |

### 13.5 High Outlet Pressure Alarm

| Possible Cause                               | Check   | Corrective Action   |
|--|---|---|
| Outlet Pressure set too high                 | Verify Outlet Pressure ( <b>OUTP</b> ) reading (section 8.4.5.1 ) | Adjust Outlet Pressure Regulator (section 8.11 )            |
| High Outlet Pressure Alarm set point too low | Verify High Outlet Pressure Alarm set point (section 8.6.2 )      | Raise High Outlet Pressure Alarm set point (section 8.6.2 ) |

### 13.6 Can't Create a High Pressure Alarm

| Possible Cause   | Check   | Corrective Action   |
|--|---|---|
| Defective Outlet Pressure Regulator                              | Verify that the Outlet Pressure Regulator can be adjusted (section 8.11 )   | Replace Outlet Pressure Regulator if unable to adjust pressure (section 11.2 )  |
| High Outlet Pressure Alarm set point higher than default setting | Verify High Outlet Pressure Alarm set point (section 8.6.2.1 )  | Adjust Outlet Pressure Regulator so that Outlet Pressure ( <b>OUTP</b> ) reading climbs over verified set point (section 9.14 )   |
| Defective Control Board  | Verify that the Outlet Pressure ( <b>OUTP</b> ) reading is higher than the High Outlet Pressure Alarm set point (above) | Replace Control Board (section 11.2 ) if Outlet Pressure ( <b>OUTP</b> ) reading is over verified High Outlet Pressure Alarm set point for more than 1 minute and fails to create an alarm. |

### 13.7 Low Outlet Pressure Alarm

| Possible Cause                               | Check   | Corrective Action  |
|--|---|--|
| Outlet Pressure set too low                  | Verify Outlet Pressure ( <b>OUTP</b> ) reading (section 8.4.5.1 )                       | Adjust Outlet Pressure Regulator (section 8.11 )               |
| High Flow condition                          | Verify Flow Rate ( <b>FLOW</b> ) reading is not higher than expected (section 8.4.5.2 ) | Troubleshoot High Flow condition (section 13.11 )              |
| Low Outlet Pressure Alarm set point too high | Verify Low Outlet Pressure Alarm set point (section 8.6.3 )                             | Lower the Low Outlet Pressure Alarm set point (section 8.6.3 ) |
| Leak in the air system                       | With no outlet flow, test fittings and hoses for leaks (section 9.16 )                  | Tighten any loose connections as required                      |

### 13.8 Can't Create a Low Pressure Alarm

| Possible Cause   | Check   | Corrective Action   |
|--|---|---|
| Defective Outlet Pressure Regulator                            | Verify that the Outlet Pressure Regulator can be adjusted (section 8.11 )   | Replace Outlet Pressure Regulator if unable to adjust pressure (section 11.2 )  |
| Low Outlet Pressure Alarm set point lower than default setting | Verify Low Outlet Pressure Alarm set point (section 8.6.3.1 )   | Adjust Outlet Pressure Regulator so that Outlet Pressure ( <b>OUTP</b> ) reading drops below verified set point (section 9.15 )   |
| Defective Control Board  | Verify that the Outlet Pressure ( <b>OUTP</b> ) reading is lower than the Low Outlet Pressure Alarm set point (above) | Replace Control Board (section 11.2 ) if Outlet Pressure ( <b>OUTP</b> ) reading is under verified Low Outlet Pressure Alarm set point for more than 1 minute and fails to create an alarm. |

## 13.9 High Humidity



### **CAUTION!**

**Do not test the Humidity Sensor with an ohm meter or apply any DC voltage.** This will render the Humidity Sensor defective.

| Possible Cause                            | Check   | Corrective Action   |
|---|---|---|
| Low System Pressure                       | Verify System Pressure (section 8.9 )   | Adjust System Pressure (section 8.9 )   |
| Low Flow Rate                             | Verify Flow Rate ( <b>FLOW</b> ) reading is low (section 8.4.5.2 )  | Install the included Precision Bleed Orifice fitting to maintain a constant air flow. (section 11.2 ) |
| High Humidity Alarm set point too low     | Verify High Humidity Alarm set point (section 8.6.4 )<br><br>If Flow Rate is low, allowing a higher alarm set point (up to 10%) will allow dryer to run within acceptable levels. | Raise High Humidity Alarm set point (section 8.6.4 )<br><br>Over 10% not recommended                  |
| Defective Humidity Sensor                 | Perform the Testing Humidity Alarm and System Shutdown test (section 9.13 )   | Troubleshoot <i>Can't Create a High Humidity Alarm / Shutdown</i> condition (section 13.10 )          |
| Heatless Dryer not cycling between towers | Verify consistent Heatless Dryer cycling (section 9.6 )   | Troubleshoot <i>Inconsistent Heatless Dryer Cycling</i> condition (section 13.13 )                    |
| Defective Control Board                   | Unplug Humidity Sensor from Control Board (see section 11.1 for Board location) Humidity reading should drop to 0%  | If Humidity did not drop to 0%, replace Control Board (section 11.2 )                                 |

### 13.10 Can't Create a High Humidity Alarm / Shutdown

These troubleshooting steps assume that the Humidity Element is removed from the Humidity Block during the *Testing Humidity Alarm and System Shutdown* (section 9.13 ) procedures.

| Possible Cause                     | Check  | Corrective Action  |
|------------------------------------|--|--|
| Humidity Sensor Cable disconnected | Verify that Humidity Sensor cable is connected to the Control Board                      | Connect Humidity Sensor cable  |
| Defective Humidity Sensor          | Verify that Humidity reading fails to climb higher than 15% or creates sporadic readings | Replace Humidity Sensor (section 11.1 )  |
| Defective Control Board            | Verify that Humidity reading is over 15% for more than 1 minute                          | Replace Control Board if no alarm is created and system does not shut down (section 11.2 ) |

### 13.11 High Flow Rate Alarm

| Possible Cause                                | Check   | Corrective Action                                |
|---|---|--|
| Air leak in downstream cable outside of dryer | Verify Flow Rate ( <b>FLOW</b> ) reading is not higher than expected (section 8.4.5.2 ) | Fix downstream problem                           |
| Air leak inside of dryer                      | Test fittings and hoses for leaks (section 9.16 )                                       | Reconnect or replace bad fitting / hose          |
| High Flow Alarm set point too low             | Verify High Flow Alarm set point (section 8.6.1 )                                       | Raise High Flow Alarm set point (section 8.6.1 ) |

### 13.12 High Cabinet Temperature Alarm

| Possible Cause           | Check   | Corrective Action   |
|--------------------------|---|---|
| Fan Failure              | Verify fan is running (section 9.9 )  | Check for loose fan wiring (section 14.1 )<br>Replace defective fan (section 11.1 ) |
| High Ambient Temperature | Verify temperature of dryer operating location. Recommended ambient temperature is 5°-30°C. | Lower the ambient temperature of the dryer's operating location                     |

### 13.13 Inconsistent Heatless Dryer Cycling

| Possible Cause           | Check  | Corrective Action  |
|--------------------------|--|--|
| Defective Solenoid Valve | Measure voltage going to the Heatless Dryer Solenoid Valves (section 9.8 ) | If voltage <b>IS</b> present, replace Solenoid Valves included in the 8,000 Hour Maintenance Kit (section 11.4 ) |
| Defective Cycle Timer    | Measure voltage going to the Heatless Dryer Solenoid Valves (section 9.8 ) | If voltage <b>IS NOT</b> present, replace the Cycle Timer (section 11.3 )  |

### 13.14 Compressor Doesn't Operate

| Possible Cause              | Check  | Corrective Action  |
|-----------------------------|--|--|
| System is in Shutdown state | On the Display Panel, verify that the system is in <b>SHUTDOWN</b> state | Press the <b>RESET</b> Button  |
| Defective Compressor        | Measure Compressor voltage (section 9.3 )                                | If voltage is good, replace Compressor (section 11.2 ) or send it in for repair (section 12. ) |
| No power to Compressor      | Measure Compressor voltage (section 9.3 )                                | If voltage is not present or fluctuates, continue to next Possible Cause                       |
| Defective Solid State Relay | Measure AC voltages at Solid State Relay (section 9.5 )                  | If measurements are bad, replace Solid State Relay (section 11.1 )                             |
| Defective Control Board     | Measure DC voltages at Solid State Relay (section 9.5 )                  | If measurements are incorrect, replace Control Board (section 11.2 )                           |

### 13.15 Compressor Won't Build Pressure

| Possible Cause           | Check   | Corrective Action                              |
|--------------------------|---|--|
| Low System Pressure      | Verify System Pressure (section 8.9 )   | Adjust System Pressure (section 8.9 )          |
| Defective Unloader Valve | Test Unloader Valve operation (section 9.7 )<br><br>If this is continuously flowing high amounts of air, the Unloader Valve is defective. | Replace Unloader Valve (section 11.2 )         |
| Leak in air system       | Check all hoses and fittings between Compressor and Air Tank for air leaks (section 9.16 )  | Connect, tighten, or replace leaking component |

### 13.16 Compressor Excessive AMP Draw

| Possible Cause          | Check   | Corrective Action  |
|-------------------------|---|--|
| Restriction in air line | Remove Discharge Hose from Compressor (hose to the heatless dryer)<br><br>Re-measure Compressor AMP Draw (section 9.2 ) | If measurement is below the recommended amps, trace hoses from Compressor to Unloader Valve looking for restrictions or kinks      |
| Compressor failing      | Remove Discharge Hose from Compressor (hose to the heatless dryer)<br><br>Re-measure Compressor AMP Draw (section 9.2 ) | If measurement is still above the recommended amps, replace the Compressor (section 11.2 ) or send it in for repair (section 12. ) |



### 13.17 High Duty Cycle Alarm

| Possible Cause                          | Check   | Corrective Action  |
|---|---|--|
| Low System Pressure                     | Verify System Pressure (section 8.9 )   | Adjust System Pressure. (section 8.9 )   |
| High Flow condition                     | Verify Flow Rate ( <b>FLOW</b> ) reading is not higher than expected (section 8.4.5.2 )   | Troubleshoot High Flow condition (section 13.11 )                                  |
| Defective Unloader Valve                | Test Unloader Valve operation (section 9.7 )<br>If this is continuously flowing high amounts of air, the Unloader Valve is defective.                   | Replace Unloader Valve (section 11.2 )   |
| Defective Heatless Dryer Solenoid Valve | Verify consistent Heatless Dryer cycling (section 9.6 )<br>If either side is continuously flowing high amounts of air, the Solenoid Valve is defective. | Replace Solenoid Valves included in the 8,000 Hour Maintenance Kit (section 11.4 ) |
| Defective Solid State Relay             | Measure AC voltages at Solid State Relay (section 9.5 )   | If measurements are bad, replace Solid State Relay (section 11.1 )                 |
| Defective Control Board                 | Measure DC voltages at Solid State Relay (section 9.5 )   | If measurements are incorrect, replace Control Board (section 11.2 )               |

### 13.18 Can't Create a High Duty Cycle Alarm

| Possible Cause                           | Check   | Corrective Action   |
|--|---|---|
| High Duty Cycle Alarm set point too high | Verify High Duty Cycle Alarm set point (section 8.6.5 )   | Retest the High Duty Cycle Alarm, allowing the Compressor to run more often than it is off (section 9.12 )  |
| Defective Control Board                  | Verify that the Compressor has run more than the verified High Duty Cycle Alarm set point (above) | Replace Control Board (section 11.2 ) if the Compressor runs more than the verified High Duty Cycle Alarm set point and fails to create an alarm. |

### 13.19 Compressor Rapid ON/OFF Cycling

| Possible Cause              | Check   | Corrective Action   |
|-----------------------------|---|---|
| Defective Solid State Relay | Measure AC voltages at Solid State Relay (section 9.5 ) | If measurements are bad, replace Solid State Relay (section 11.1 )  |
| Defective Control Board     | Measure DC voltages at Solid State Relay (section 9.5 ) | If measurements are incorrect, replace Control Board (section <b>Error! Reference source not found.</b> ) |

### 13.20 Contacting PUREGAS Technical Support

Please read the *Before You Call PUREGAS* section (13.1 )

Once you have exhausted all of the potential problems and solutions covered in the *Troubleshooting Your Dryer* section, and you still require further assistance to correct a problem, contact PUREGAS Technical Support:

(800) 521-5351 (**option 1**)

Have the following information available:

**Trouble Ticket # (if following-up on a previous call):**\_\_\_\_\_

**Technician Name:**\_\_\_\_\_ **Phone #:**\_\_\_\_\_

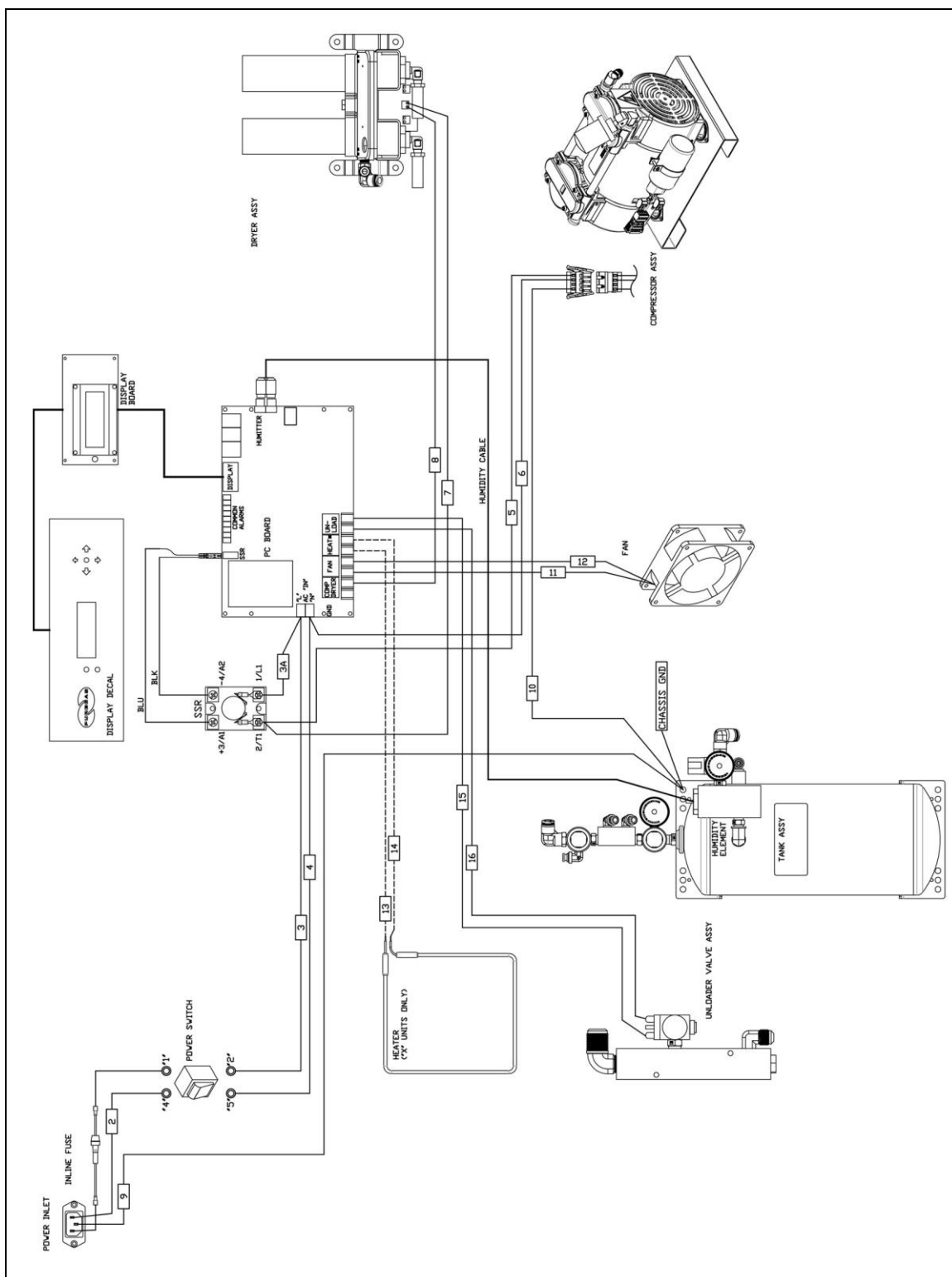
**Model #:**\_\_\_\_\_ **Serial #:**\_\_\_\_\_

**Company Name:**\_\_\_\_\_ **Location Name:**\_\_\_\_\_

**City:**\_\_\_\_\_ **State:**\_\_\_\_\_

## 14. Appendix

## 14.1 Wiring Diagram



## 14.2 Set Point Limits and Defaults

### 14.2.1 System Adjustments

| Description  | Minimum Value        | Maximum Value           | Default Value  | Unit of Measurement |
|--|----------------------|-------------------------|----------------|---------------------|
| System Pressure<br>W2 & W2LP models<br>W2HP models         |                      |                         | 551.6<br>621.0 | kPa                 |
| Static Pressure<br>W2 & W2LP models<br>W2HP models         |                      |                         | 117.0<br>414.0 | kPa                 |
| Outlet Pressure<br>W2 models<br>W2LP models<br>W2HP models | 13.8<br>2.07<br>13.8 | 103.4<br>51.71<br>414.0 |                | kPa                 |
| Alarm Delay  | OFF                  | ON                      | ON             |                     |
| Startup Delay  | 0                    | 10                      | 0              | Seconds             |

### 14.2.2 Alarm Set Points

| Description   | Minimum Value      | Maximum Value           | Default Value          | Unit of Measurement | Shutdown |
|---|--------------------|-------------------------|------------------------|---------------------|----------|
| High Flow Alarm<br>W2 & W2LP models<br>W2HP models                    | 0<br>0             | 57<br>28.3              | 42<br>28.3             | SCMD                |          |
| High Outlet Pressure Alarm<br>W2 models<br>W2LP models<br>W2HP models | 3.6<br>2.14<br>3.6 | 138.0<br>51.71<br>414.0 | 83.0<br>51.71<br>241.0 | kPa                 |          |
| Low Outlet Pressure Alarm<br>W2 models<br>W2LP models<br>W2HP models  | 3.5<br>2.07<br>3.5 | 137.9<br>51.64<br>413.9 | 45.0<br>2.07<br>172.0  | kPa                 |          |
| High Humidity Alarm   | 3                  | 15                      | 10                     | %                   | YES      |
| High Duty Cycle Alarm   | 0                  | 99                      | 70                     | %                   |          |
| High Cabinet Temperature Alarm  |                    |                         | 48.8                   | Deg C               | YES      |
| Compressor Total Run Time Alarm                                       |                    |                         | 8000                   | Hours               |          |

### 14.2.3 System Operations

| Description                                | ON Value      | OFF Value    | Default Value | Unit of Measurement |
|--|---------------|--------------|---------------|---------------------|
| Compressor<br>W & WLP models<br>WHP models | 172*<br>414.0 | 620<br>621.0 |               | kPa                 |
| Fan  | 32            | 27           |               | Deg C               |

\*(345 - 620 kPa for Dryers using Firmware v2.84 and older)

## 14.3 SNMP Parameters

### Device Configuration Information

|  |  |
|--|--|
| Device ID  | Alphanumeric (Defined by Customer)             |
| Device Model   | Alphanumeric (Factory Preset)                  |
| Device Firmware Version  | Numeric (Factory Preset)                       |
| Current Date/Time  | Numeric (mm/dd/yy hh:mm)                       |
| IP Address   | Numeric (xxx.xxx.xxx.xxx)                      |
| Subnet Mask  | Numeric (xxx.xxx.xxx.xxx)                      |
| Gateway Address  | Numeric (xxx.xxx.xxx.xxx)                      |
| SNMP Trap Server Address   | Numeric (xxx.xxx.xxx.xxx)                      |
| SNMP Read Community String<br>(also sets SNMP Trap Community String) | Alphanumeric (6-14 digits, Default = "public") |
| SNMP Write Community   | Alphanumeric (6-14 digits, Default = "123456") |

### Status Readings (Read-Only)

|                                   |                 |
|-----------------------------------|-----------------|
| Outlet Pressure Reading           | Numeric (kPa)   |
| Tank Pressure Reading             | Numeric (kPa)   |
| Humidity Reading                  | Numeric (%)     |
| Flow Reading                      | Numeric (SCMD)  |
| Cabinet Temperature Reading       | Numeric (DEG C) |
| Compressor Total Run Time Reading | Numeric (Hours) |
| Duty Cycle Reading                | Numeric (%)     |
| System Status                     | ON / SHUTDOWN   |
| Compressor Status                 | ON / OFF        |
| Fan Status                        | ON / OFF        |
| Heater Status (Outdoor Unit Only) | ON / OFF        |

### Alarm Readings (Read-Only)

|                                |            |
|--------------------------------|------------|
| High Flow Alarm                | OK / Alarm |
| High Outlet Pressure Alarm     | OK / Alarm |
| Low Outlet Pressure Alarm      | OK / Alarm |
| High Humidity Alarm            | OK / Alarm |
| High Cabinet Temperature Alarm | OK / Alarm |
| High Duty Cycle Alarm          | OK / Alarm |
| Maintenance Required Alarm     | OK / Alarm |
| Total Alarm                    | OK / Alarm |

### Configuration Settings (Read-Write)

|   |                   |
|---|-------------------|
| High Flow Alarm Threshold               | Numeric (SCMD)    |
| High Outlet Pressure Alarm Threshold    | Numeric (kPa)     |
| Low Outlet Pressure Alarm Threshold     | Numeric (kPa)     |
| High Humidity Alarm Threshold           | Numeric (%)       |
| High Duty Cycle Alarm Threshold         | Numeric (%)       |
| Reset Compressor Total Run Time Reading | Numeric (Hours)   |
| Start Up Delay Time                     | Numeric (Seconds) |
| Alarm Reset                             | RESET             |
| Alarm Delay                             | ON / OFF          |

### Alarm Traps Sent to SNMP Server

|                          |
|--------------------------|
| High Flow                |
| High Outlet Pressure     |
| Low Outlet Pressure      |
| High Humidity            |
| High Cabinet Temperature |
| High Duty Cycle          |
| Maintenance Required     |

## **15. Limited Warranty Agreement**

PUREGAS products carry a one (1) year warranty against defective workmanship and material. This period starts at date of shipment. Not included are the components subject to normal replacement during a year's operating time.

No claims for labor in replacing defective parts or for consequential damages will be allowed. Replacement parts will be invoiced in the regular way, with invoices subject to adjustment after the parts claimed defective are examined at our factory. In addition, no material or parts will be accepted at our factory for in-warranty repairs or credit without previous authorization from PUREGAS.

Responsibility for damages incurred in transit will be borne by the user and the user in turn should file any damage claim against the carrier. All warranty items are F.O.B. Broomfield, Colorado. Freight charges are the responsibility of the user.

This warranty shall not apply to any PUREGAS product which shall have been repaired or altered in any way by anyone other than PUREGAS or authorized personnel so as to affect, in our judgment, its proper functioning or reliability, neither will it apply to any product which has been subject to misuse, negligence, or accident. The installation of unauthorized non PUREGAS parts will void the warranty on those PUREGAS products.

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### **Registration Reminder**

If you haven't already done so, please take a moment to register your PUREGAS P1500W2 Series Air Dryer. **Registering is necessary to activate this Limited Warranty on your product.** Once you register, you are eligible to receive free technical support, as well as updates concerning your PUREGAS products.

*See Section 7. for details on Registering Your Dryer.*

## 16. Contacting PUREGAS

### 16.1 General

PUREGAS, LLC  
226A Commerce Street  
Broomfield, Colorado 80020

(800) 521-5351  
(303) 427-3700  
Fax – (303) 657-2233

[info@puregas.com](mailto:info@puregas.com)  
[www.puregas.com](http://www.puregas.com)

### 16.2 Sales

(800) 521-5351 (**option 2**)  
Fax – (303) 657-2205

[sales@puregas.com](mailto:sales@puregas.com)  
[parts@puregas.com](mailto:parts@puregas.com)

### 16.3 Service

(800) 521-5351 (**option 3**)  
Fax – (303) 657-2205

### 16.4 Technical Support

(800) 521-5351 (**option 1**)

**DON'T FORGET TO REGISTER YOUR DRYER!**

*See Section 7. for details on Registering Your Dryer.*



## This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.