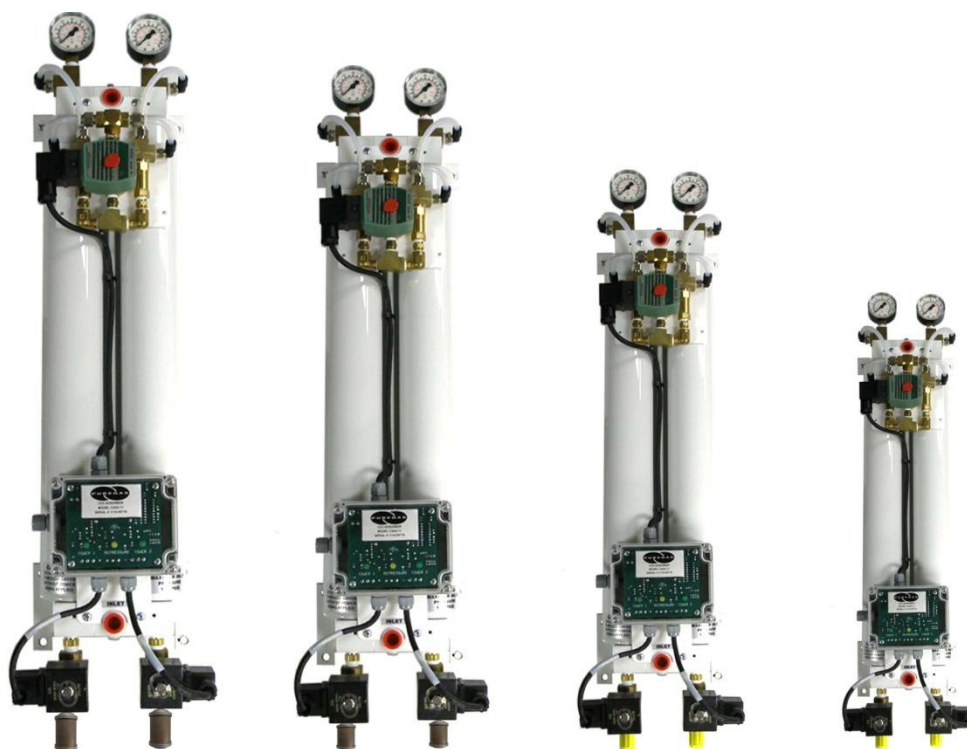


# CAS Series CO2 Adsorber / Dryer



## User's Guide

Models covered:

CAS1 CAS2 CAS3 CAS4





## 1. Welcome & Congratulations

Congratulations on your purchase of a new PUREGAS CAS SERIES CO2 ADSORBER / 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 unit and would like to thank you for choosing PUREGAS for your CO2 adsorber / dryer requirements. We also hope that you will continue to choose us for your future Compressed Air Treatment and related products purchases.

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

[www.airdryers.com](http://www.airdryers.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 CAS SERIES CO2 ADSORBER / DRYER. It will cover topics including: safety, specifications, installation, testing, maintenance, and troubleshooting issues. Observation and compliance with this User's Guide will ensure the maximum life and efficiency of your adsorber / dryer.


This User's Guide should be read thoroughly prior to installing, operating, or servicing the adsorber / dryer in order to become familiar with the recommended procedures. This will minimize the possibility of personal injury or damage to the adsorber / dryer 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 and maintenance of your adsorber / dryer. PLEASE READ THIS SECTION BEFORE PERFORMING ANY OPERATION OR PROCEDURE ON YOUR ADSORBER / 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.



### **IMPORTANT!**

Performing procedures not described in this User's Guide MAY VOID THE WARRANTY.



### **IMPORTANT!**

Appropriate inlet filtration is **MANDATORY** and outlet filtration is recommended for all applications.



### **IMPORTANT!**

Each adsorber / dryer is sized for specific operating conditions. For **OPTIMUM** performance, the maximum available operating pressure should be maintained across the unit. Any pressure reduction or flow control should be done downstream of the unit. Depending on the magnitude of the change, the size of the desiccant chambers or orifice may need to be changed.

## 5. Overview & Specifications

### 5.1 Product Description

The CAS SERIES CO<sub>2</sub> ADSORBER / DRYER from PUREGAS is designed to remove CO<sub>2</sub> and moisture from compressed air. The CO<sub>2</sub> adsorber / dryer uses dual towers with media beds featuring 13X molecular sieve in a pressure swing adsorption process. Adsorbed moisture and CO<sub>2</sub> are purged to the atmosphere while the CO<sub>2</sub>-free air is provided at the outlet port.

### 5.2 Key Features

- Continuous, ultra-dry, CO<sub>2</sub>-free air to less than 1 PPM
- Fully repressurizing operation
- Large internal air passages for low pressure drop
- Outlet flow capacities of 30 to 180 L/min at 100 PSIG
- Operating pressures of 50 to 150 PSIG
- Rugged, light-weight aluminum construction
- Solid state timer with LED display for visual monitoring of cycle
- Ideal for OEM and point-of-use applications

### 5.3 CAS Series CO<sub>2</sub> Adsorber / Dryer Models

Model	Inlet Flow	Purge Flow	Outlet Flow
CAS1	50	20	30
CAS2	100	40	60
CAS3	160	70	90
CAS4	320	140	180

Notes:

1. Flow capacities in L/min shown are shown with standard orifice operated at 100 PSIG.
2. Inlet and outlet flow capacities will be greater at higher pressures and lower at lower pressures. Consult factory for other pressures.
3. Standard compressed air inlet conditions are 70°F saturated.

## 5.4 Technical Specifications

<b>Dimensions</b>		
	<b>CAS1</b>	21.0" H x 6 1/2" W x 5.0" D
	<b>CAS2</b>	25.0" H x 6 1/2" W x 5.0" D
	<b>CAS3</b>	40 3/8" H x 9 1/2" W x 6 1/4" D
	<b>CAS4</b>	44 1/4" H x 10.0" W x 6 5/8" D
<b>Voltage Requirements</b>		230 VAC, 1 Phase, 50/60 Hz 115 VAC, 1 Phase, 50/60 Hz 24 VDC 12 VDC
<b>Power</b>		9 Watts
<b>Electrical Rating</b>		NEMA 4
<b>Solenoid Valve Coil Voltage</b>		230 VAC, 120 VAC, 24 VDC or 12 VDC
<b>Operating Ambient Temperature Range</b>		33° to 120° F (0.5° to 49° C)
<b>Inlet Temperature</b>		≤ 70°F Recommended 125°F Maximum
<b>Maximum Inlet Pressure</b>		150 PSIG (VAC units) 125 PSIG (VDC units)
<b>Cycle Timer</b>		Solid State with Memory
<b>Purge Cycle</b>		
	<b>CAS1-CAS2</b>	23 seconds purge 7 seconds re-pressurizing 30 seconds per side continuous
	<b>CAS3-CAS4</b>	46 seconds purge 14 seconds re-pressurizing 60 seconds per side continuous
<b>Media</b>		13X Molecular Sieve & Activated Alumina
<b>Noise Level</b>		<90 dBA
<b>Inlet / Outlet Connections</b>		
	<b>CAS1-CAS2</b>	3/8" NPT Female
	<b>CAS3-CAS4</b>	1/2" NPT Female

## 6. Installing Your Adsorber / Dryer

### 6.1 Safety & Warning Information



#### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** Many procedures performed during installation, and testing of this adsorber / 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!**

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 adsorber / dryer must match unit rating:

- 230 VAC, 1 Phase, 50/60 Hz
- 115 VAC, 1 Phase, 50/60 Hz
- 24 VDC
- 12 VDC



#### **CAUTION!**

Do **NOT** exceed the SCFM outlet flow capacity of the adsorber / dryer. Be aware of what your unit is rated for before installation of your CAS Series CO<sub>2</sub> Adsorber / Dryer.



## 6.2 Before You Begin

**6.2.1 Carefully inspect the entire unit including the shipping box 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 Adsorber / Dryer* section to familiarize yourself with the components and procedures before performing the installation.

**6.2.3** Verify the installation location of the adsorber / dryer:

**6.2.3.1** Ambient temperature is between 33° and 120°F

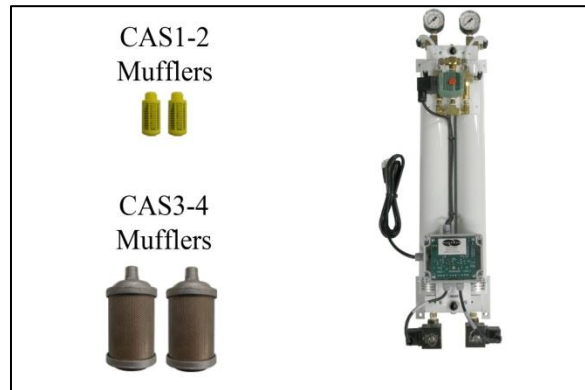
**NOTE:** Higher temperatures will decrease component lifespan.

**6.2.3.2** Meets one of the following power requirements:

- 230 VAC, 1 Phase, 50/60 Hz
- 115 VAC, 1 Phase, 50/60 Hz
- 24 VDC
- 12 VDC

### 6.3 Included Contents

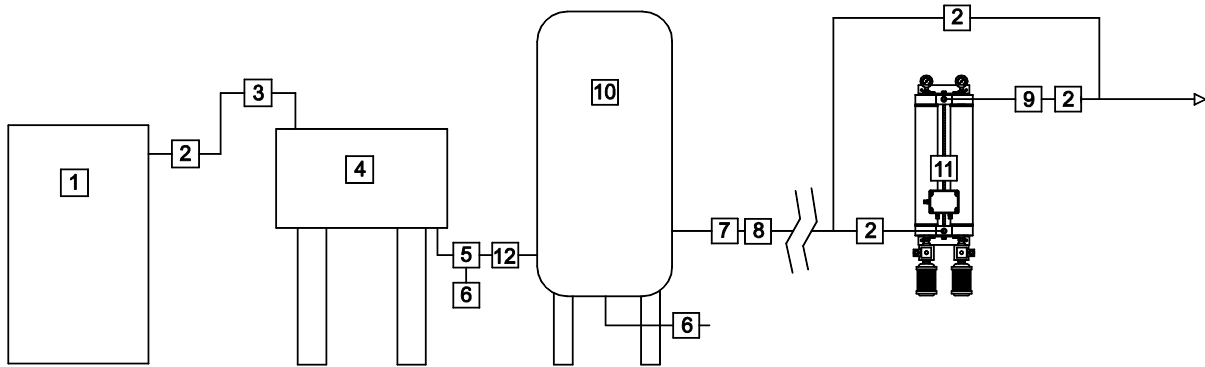
- (1) CAS Series CO<sub>2</sub> Adsorber /  
Dryer
- (1) User's Guide (not shown)
- (2) Purge Mufflers



### 6.4 Required Tools and Materials

- Needle nose pliers
- Mounting hardware
- Drill
- Drill bit (varies on mounting hardware)
- Small adjustable wrench
- Small flathead screwdriver
- Medium adjustable wrench (used only when installing a Complete System)
- Cup of soapy water
- 1-inch paint brush (recommended)

### 6.5 Recommended Adsorber / Dryer Installation



1	Compressor	7	Pre-Filter, 5 Micron Particulate
2	Shut-off Valve	8	Pre-Filter, 0.01 Micron Coalescing
3	Flex Connector	9	After-Filter Regulator Assembly
4	Aftercooler	10	Storage Tank
5	Liquid Separator	11	CAS Series CO <sub>2</sub> Adsorber / Dryer
6	Drain Valve	12	Check Valve

## 6.6 Installation Steps



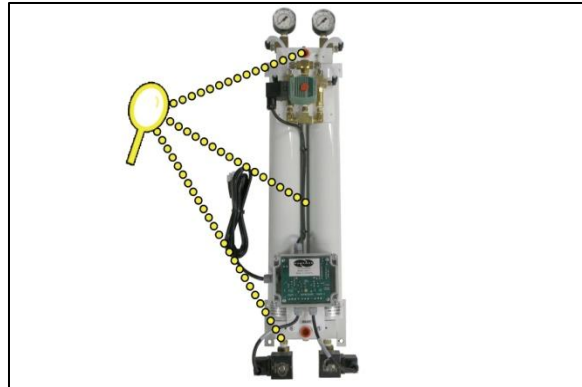
### **IMPORTANT!**

To properly operate the CO2 Adsorber / Dryer, PUREGAS recommends that all air filtration and options be installed. **SEE SECTION 10.3**

**6.6.1** Remove the CAS Series CO2 Adsorber / Dryer from packaging.

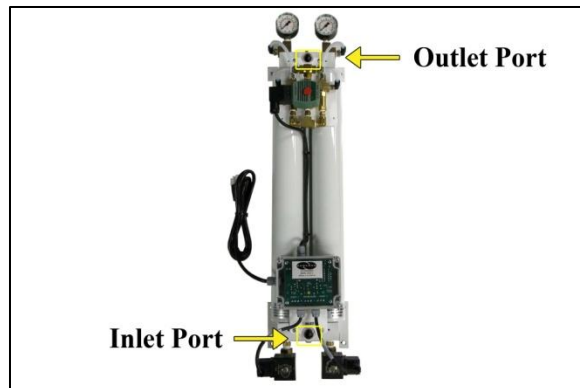
**6.6.2** Check for loose parts or wiring.

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

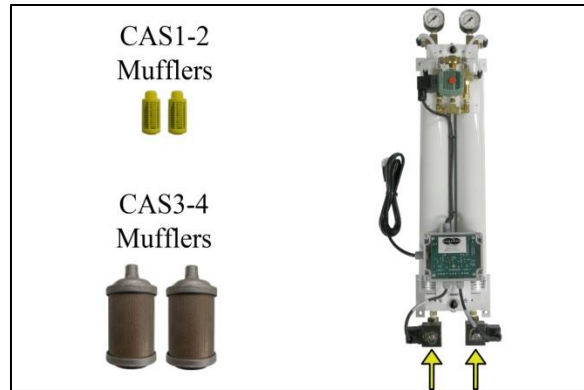


**6.6.3** Place the CAS Series CO2 Adsorber / Dryer at the operating location.

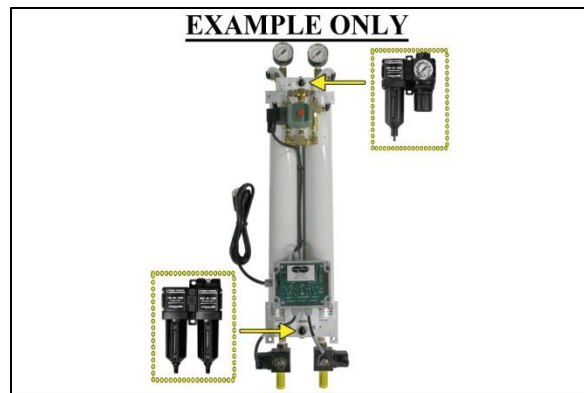
**6.6.4** With needle nose pliers remove and discard plugs.



**6.6.5** Install purge mufflers.



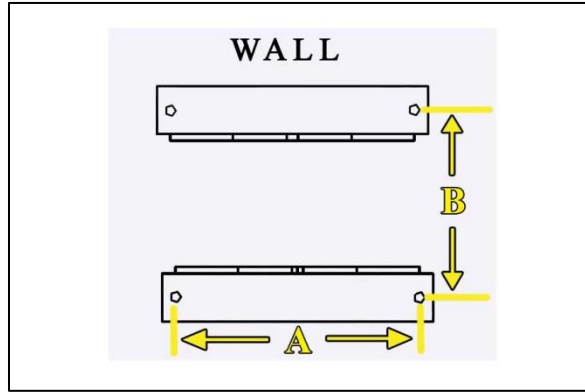
**6.6.6** Install inlet and outlet fittings, filters and assemblies to the CAS adsorber / dryer.



**⚠ CAUTION:** When installing a typical Complete Air Adsorber / Dryer, or Point-of-Use System, Puregas recommends assembling ALL components before mounting the CAS Series Adsorber / Dryer.

**NOTE:** If using floor stand option proceed to 6.6.9. The included instructions, for this accessory, offer an alternative way to mount your CAS adsorber / dryer.

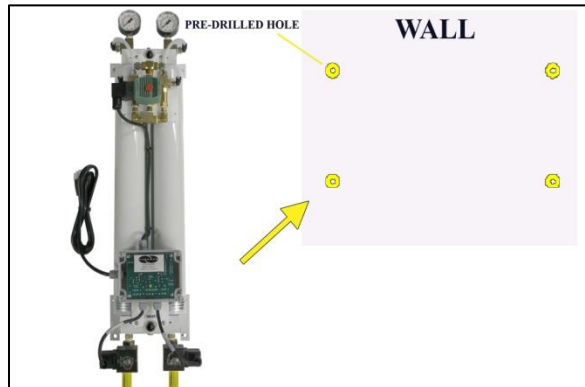
**6.6.7** Pre-drill holes in wall, and install wall mount hardware.  
(See chart below)



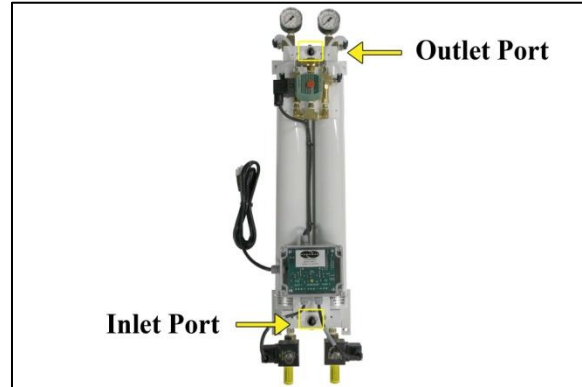
**⚠ IMPORTANT:** When wall mounting; allow 2-1/2" above unit for tower removal and replacement.

Model	Width (A) x Height (B)
CAS1	5 3/4" x 2 13/16"
CAS2	5 3/4" x 2 13/16"
CAS3	7" x 32 7/16"
CAS4	9" x 37 1/16"

**6.6.8** Mount CAS to wall using secure wall mounting hardware.



**6.6.9** Connect the air lines to the inlet and outlet port.

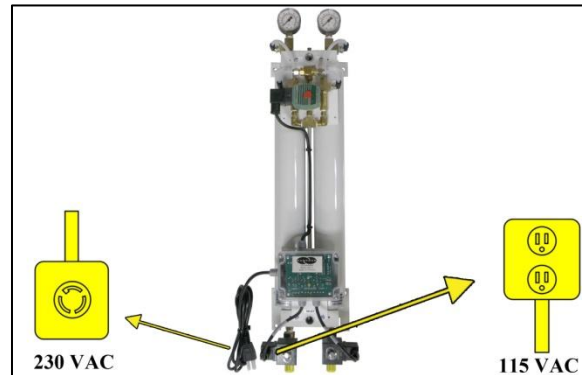


**6.6.10** Pressurize the CAS adsorber / dryer to line pressure for at least 30 seconds prior to powering up the unit.

**⚠ CAUTION:** Do not exceed SCFM outlet flow capacity of the adsorber / dryer.

**6.6.11** Connect Power Cord to correct power source:

- 230 VAC power outlet, 1 Phase.
- 115 VAC power outlet, 1 Phase.
- 24 VDC
- 12 VDC



**NOTE:** Customer must supply a 230 VAC plug to match their receptacle. For DC units, connect to correct voltage and polarity.

### 6.6.12 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.

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

**6.6.12.2** 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*

**6.6.13 REGISTER YOUR ADSORBER / DRYER.** *See section 7. for details.*

## 6.7 Installation Checklist

- No shipping damage was detected.
- Unit mounted properly and secure.
- No air leaks are present.



## 7. Registering Your CAS Series CO2 Adsorber / Dryer

Please take a moment to register your PUREGAS CAS SERIES CO2 ADSORBER / 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. Testing Your Adsorber / Dryer

### 8.1 Safety & Warning Information



#### **WARNING!**

**Extreme care should be exercised to avoid contact with live electrical circuits.** Many procedures performed during installation, testing, and maintenance of this adsorber / dryer requires 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!**

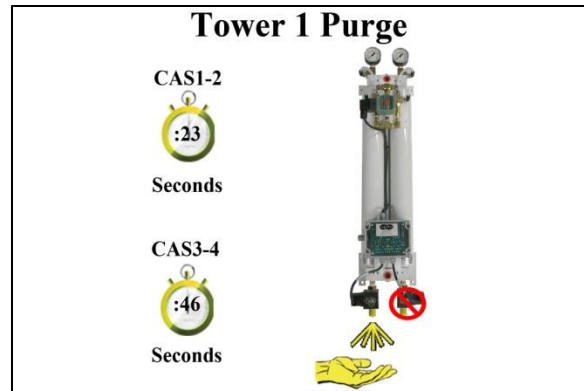
Observe precautions for handling **Electrostatic Sensitive Devices.**

## 8.2 Testing Consistent Adsorber / Dryer Purge Cycling

8.2.1 Place your hand beneath the purge mufflers to feel for purging air. Air should:

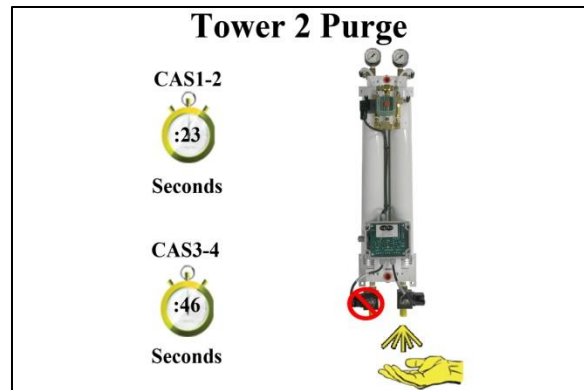
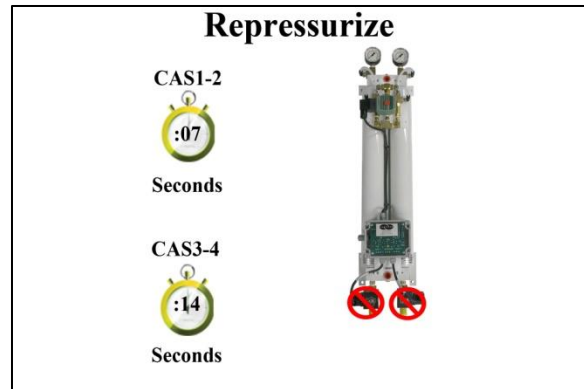
### For CAS1-CAS2:

- Tower 1 will purge for **23 Seconds**, and re-pressurize for 7 seconds
- Tower 2 will purge for **23 Seconds**, and re-pressurize for 7 seconds
- Tower 1 will purge for **23 Seconds**, and re-pressurize for 7 seconds
- ...and so on.



### For CAS3-CAS4:

- Tower 1 will purge for **46 Seconds**, and re-pressurize for 14 seconds
- Tower 2 will purge for **46 Seconds**, and re-pressurize for 14 seconds
- Tower 1 will purge for **46 Seconds**, and re-pressurize for 14 seconds
- ...and so on.



### 8.3 Visually Verifying Incoming Voltage

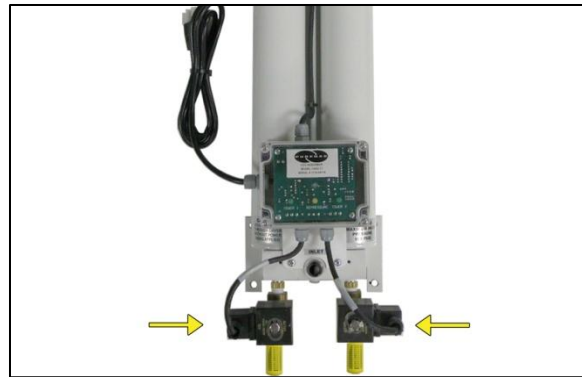
**8.3.1** LEDs will illuminate to indicate what the current cycle status is; Tower 1, Repressure, or Tower 2.



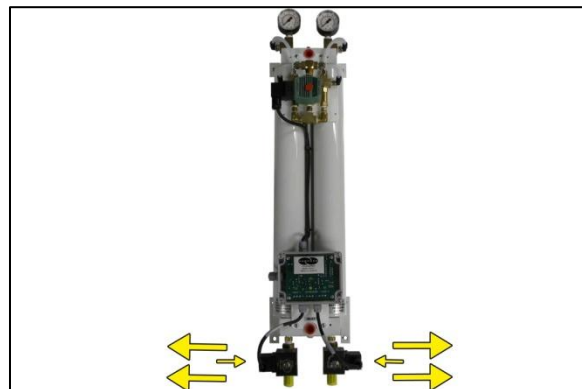
### 8.4 Measuring Solenoid Voltage

**8.4.1** Disconnect the CAS from the power source.

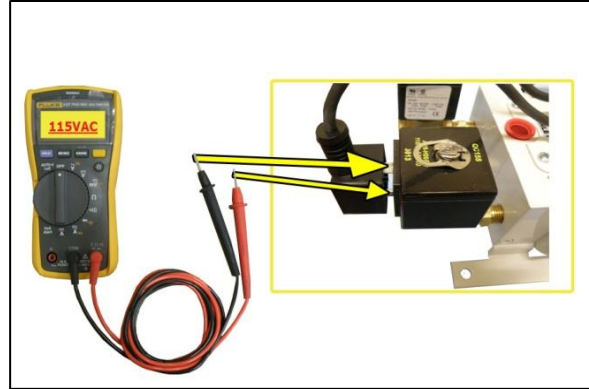
**8.4.2** Locate the Purge Solenoid screws.



**8.4.3** Use a flathead screwdriver, loosen screw, and pull back solenoid valve cover.



**8.4.4** Connect the CAS back into the power source. With the unit running, use a Voltmeter to measure the voltage across the top two terminals.



**8.4.5** Continue to measure for up to 60 seconds if no voltage is initially measured.

The voltage should measure:

- **230 VAC** for the 230 VAC models.
- **115 VAC** for the 115 VAC models.
- **24 VDC** for the 24 VDC models.
- **12 VDC** for the 12 VDC models.

*If voltage is incorrect replace the cycle timer. If voltage is correct and the solenoid is not purging properly, replace the solenoid. For the DC units, verify if the polarity is correct before replacing the solenoid. See sections 10.1 for part detail and 10.4 for ordering information.*

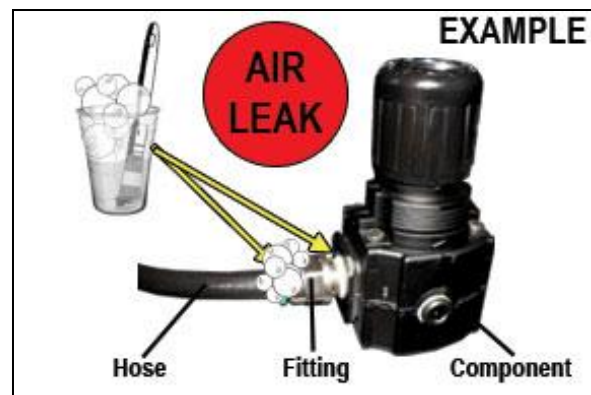
## 8.5 Testing Air Fittings & Hoses for Leaks

**NOTE:** This is a general procedure that can be applied to any fitting or hose that has air pressure in it.

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

**8.5.2** 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*

## 9. Maintaining Your Adsorber / Dryer

In order to ensure that your CAS Series CO<sub>2</sub> Adsorber / Dryer continues to operate efficiently and reliably, PUREGAS recommends performing the following maintenance procedures at the specified Six Month intervals.

It is also recommended that you print out the included *Maintenance* log sheet (*section 16*) and record all completed maintenance for historical tracking and reference purposes.

The log sheet includes 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.

### 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 adsorber / 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!**

**SHUT DOWN IMMEDIATELY FOR REPAIRS** if the adsorber / dryer shows any evidence of excessive noise.



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



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

## 9.2 Maintenance Log Sheet

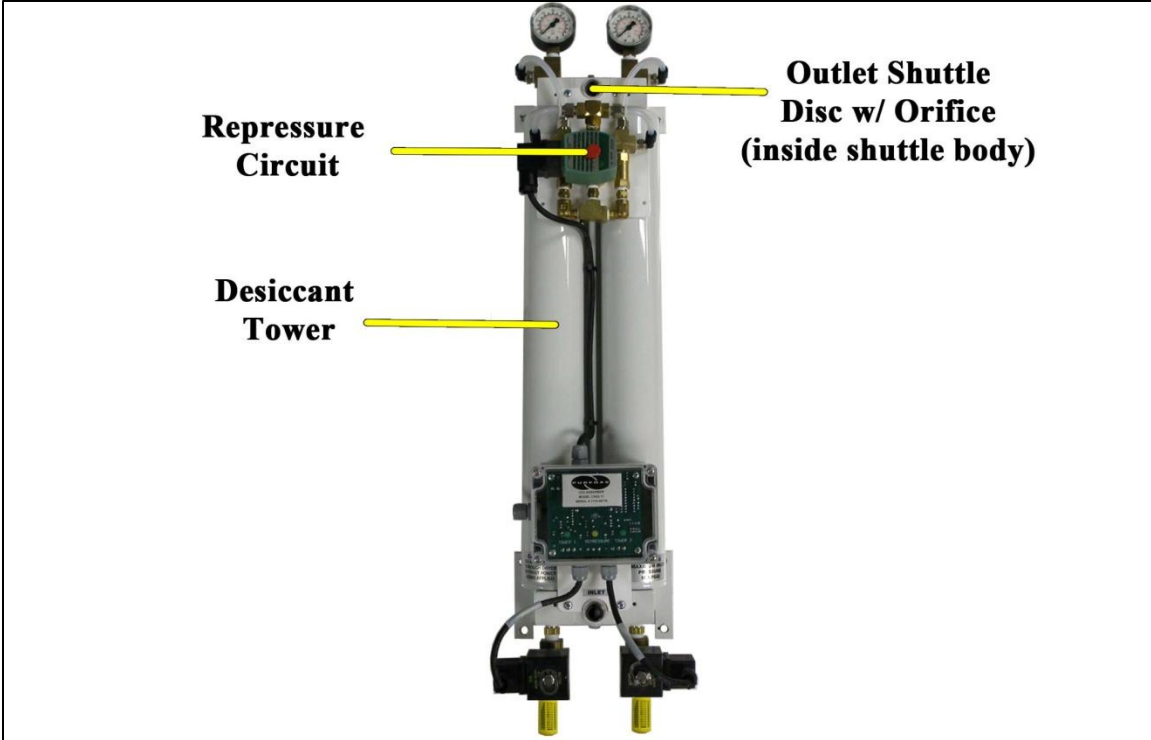
MODEL: \_\_\_\_\_ LOCATION NAME: \_\_\_\_\_  
 SERIAL NUMBER: \_\_\_\_\_ ADDRESS: \_\_\_\_\_  
 DATE INSTALLED: \_\_\_\_\_

Procedure	Section	Maintenance Interval (Months)				
		6	12	18	24	30
Visually Inspect CAS for Loose Wiring or Hardware	6.6.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test Consistent Adsorber / Dryer Cycling	8.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visually Verify Cycle Timer has Voltage	8.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Replace Purge Mufflers	10.3		<input type="checkbox"/>		<input type="checkbox"/>	
Replace Filter Elements (If installed)	10.3		<input type="checkbox"/>		<input type="checkbox"/>	
<b>Maintenance Performed by:</b>						
<b>Date of Maintenance:</b>						



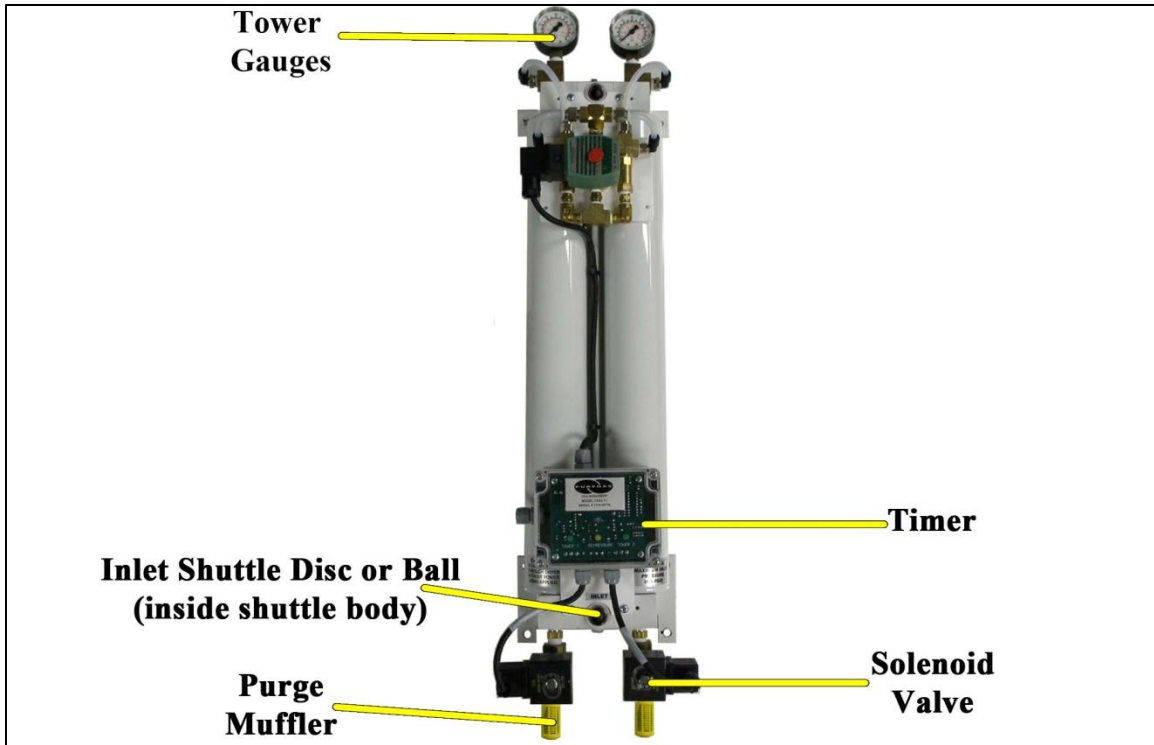
**10. Replacement Parts & Accessories**

**10.1 Parts**



Description	Part Number				Qty	Rec. Spare
	230 VAC	115 VAC	24 VDC	12 VDC		
Repressure Circuit						
CAS1	51593-230V	51593-115V	51593-24VDC	51593-12VDC	1	✓ (1)
CAS2	51594-230V	51594-115V	51594-24VDC	51594-12VDC		
CAS3	51405-230V	51405-115V	51405-24VDC	51405-12VDC		
CAS4	51721-230V	51721-115V	51721-24VDC	51721-12VDC		
Desiccant Tower			[Hatched Area]		2	
CAS1	51401					
CAS2	51402					
CAS3	51403					
CAS4	51404					
Outlet Shuttle Disc w/ Orifice			[Hatched Area]		1	
CAS1	50085-26					
CAS2	50085-39					
CAS3	3053					
CAS4	3067					





10.2 Parts Continued



Description	Part Number		Quantity	Recommended Spare
	CAS1-2	CAS3-4		
Tower Gauges	20500		2	
Inlet Shuttle Disc	50080		1	
Inlet Shuttle Ball		51518	1	
Purge Muffler	20502	30802	2	✓ (2)
Timer	230 VAC 115 VAC 24 VDC 12 VDC	51601-230V 51601-115V *51601-24VDC *51601-24VDC	51407-230V 51407-115V *51407-24VDC *51407-24VDC	1   ✓ (1)
Solenoid Valve	230 VAC 115 VAC 24 VDC 12 VDC	20010 20009 51986 P013417	30009 30010 52122 Call Factory	2   ✓ (2)

\*Timers are dual voltage

### 10.3 Accessories for your Adsorber / Dryer

	Description	Model Number	Part Number
	<p><b>Filter Kit</b></p> <p>Keeps all impurities from contaminating the desiccant towers. Includes 5 micron pre-filter, 0.01 coalescing pre-filter, and 0.5 micron after-filter.</p>	<p>CAS1-2 CAS3-4</p>	<p>51355 51360</p>
	<p><b>Filter Kit w/ Regulator</b></p> <p>Keeps all impurities from contaminating the towers and allows you to regulate your outlet pressure. Includes 5 micron pre-filter, 0.01 coalescing pre-filter, and 0.5 micron after-filter, gauge and regulator.</p>	<p>CAS1-2 CAS3-4</p>	<p>51355-R 51360-R</p>
	<p><b>Filter Element Kit</b></p> <p>Replacement elements for a 5 micron pre-filter, 0.01 coalescing pre-filter, and 0.5 micron after filter.</p>	<p>CAS1-4</p>	<p>51507</p>
	<p><b>Floor Stand Kit</b></p> <p>A heavy duty floor stand that allows you to mount your CAS directly to it.</p>	<p>CAS1-2 CAS3-4</p>	<p>20508 30808</p>

## 10.4 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 department to order:

(303) 427-3700

Fax – (303) 657-2205

sales@puregas.com

## 11. Service & Repair

### 11.1 Services Offered at Puregas' Facility

- **Complete Dryer Repair**
  - Replace desiccant towers, install viton o-ring kit, change out solenoid assemblies (as required), clean both shuttle discs or ball (replace if necessary), replace purge mufflers, and verify solid state timer is working properly.

## 11.2 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.

## 12. Troubleshooting Your Adsorber / Dryer

### 12.1 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 adsorber / 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.

## 12.2 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!**

Extreme care should be exercised to avoid contact with live electrical circuits. Many procedures performed during installation and testing of this adsorber / 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.



### **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.


## 12.3 Low Pressure

Possible Cause	Check	Corrective Action
Dirty or obstructed inlet filter	Verify if inlet air filters elements are clean	Replace filter elements (section 10.3)
Excessive purge		Test for Excessive Purge (section 12.4)

### 12.4 Excessive Purge

Possible Cause	Check	Corrective Action
Defective solenoid valve	Test for consistent dryer cycle, and verify voltage (section 8.2 and 8.4)	Replace valve (section 10.2)
Defective cycle timer	Test for consistent voltage to the solenoid valves (section 8.2 )	Replace cycle timer (section 10.2)
Inlet tubing too small	Verify supply air line is the same size as the inlet port.	Replace tubing

### 12.5 Delivers High CO2 Levels and/or Wet Air

Possible Cause	Check	Corrective Action
High inlet temperature	Verify inlet temperature is 70-75°F.	Reduce inlet air temperature
Air flow in excess of rated capacity	Verify outlet flow does not exceed air dryer's rated flow	Reduce air usage downstream
Low inlet pressure		Test for low pressure or increase pressure. (section 12.3)
Defective solenoid valve	Test for consistent purge cycle, and verify voltage (section 8.2 and 8.4)	Replace valve (section 10.2 )
Defective cycle timer	Verify timing cycle (section 8.3)	Replace timer (section 10.2 )
Restricted Purge	Test for proper purge (section 8.2)	Replace purge mufflers (section 10.2)
Contamination of desiccant	Remove in and outlet connections and look for white powder	If white powder is present replace towers (section 10.1)

## 12.6 Contacting PUREGAS Technical Support

**Please read the *Before You Call PUREGAS* section (12.1)**

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

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

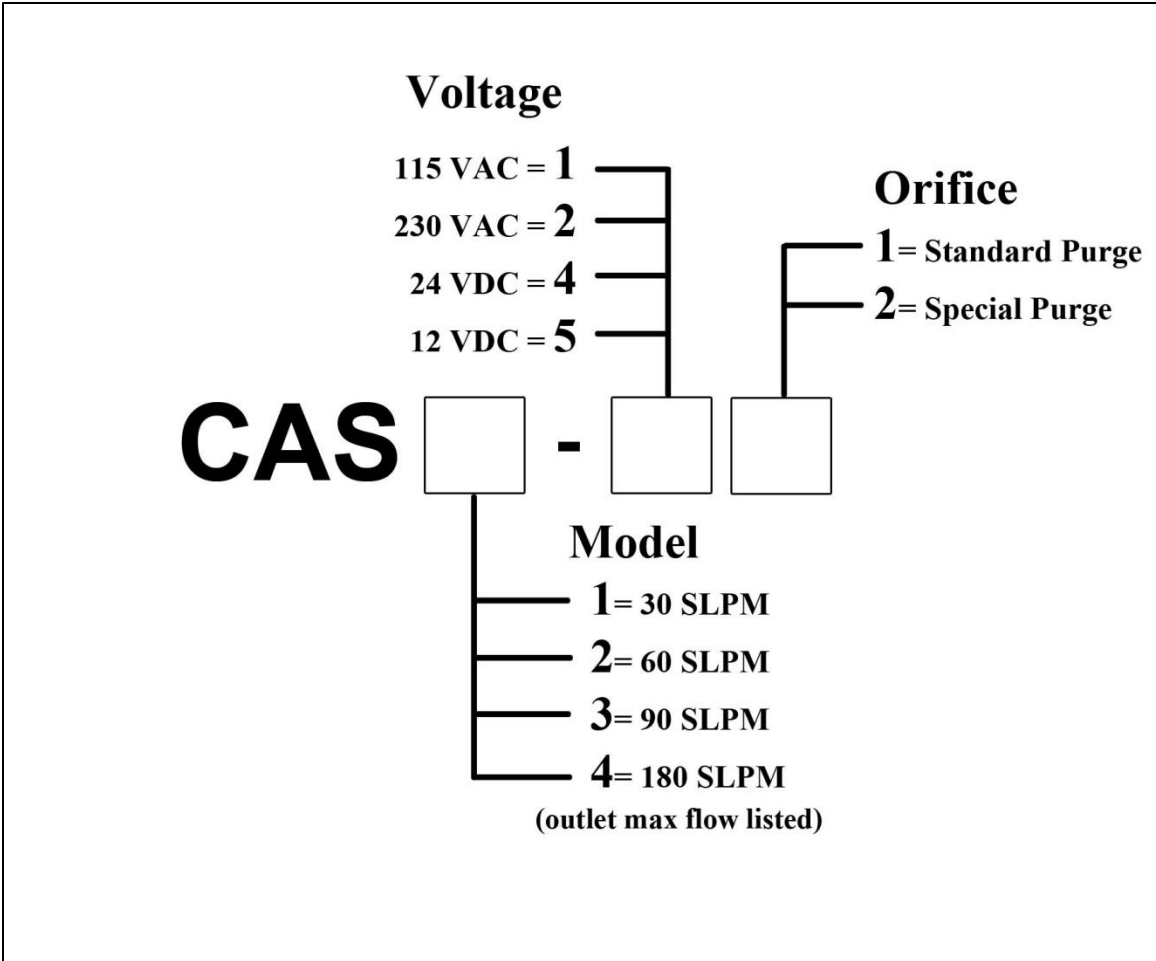
Have the following information available:

**Trouble Ticket # (if following-up on a previous call):** \_\_\_\_\_  
**Technician Name:** \_\_\_\_\_ **Phone #:** \_\_\_\_\_  
**Model #:** \_\_\_\_\_ **Serial #:** \_\_\_\_\_  
**Company Name:** \_\_\_\_\_ **Location Name:** \_\_\_\_\_  
**City:** \_\_\_\_\_ **State:** \_\_\_\_\_

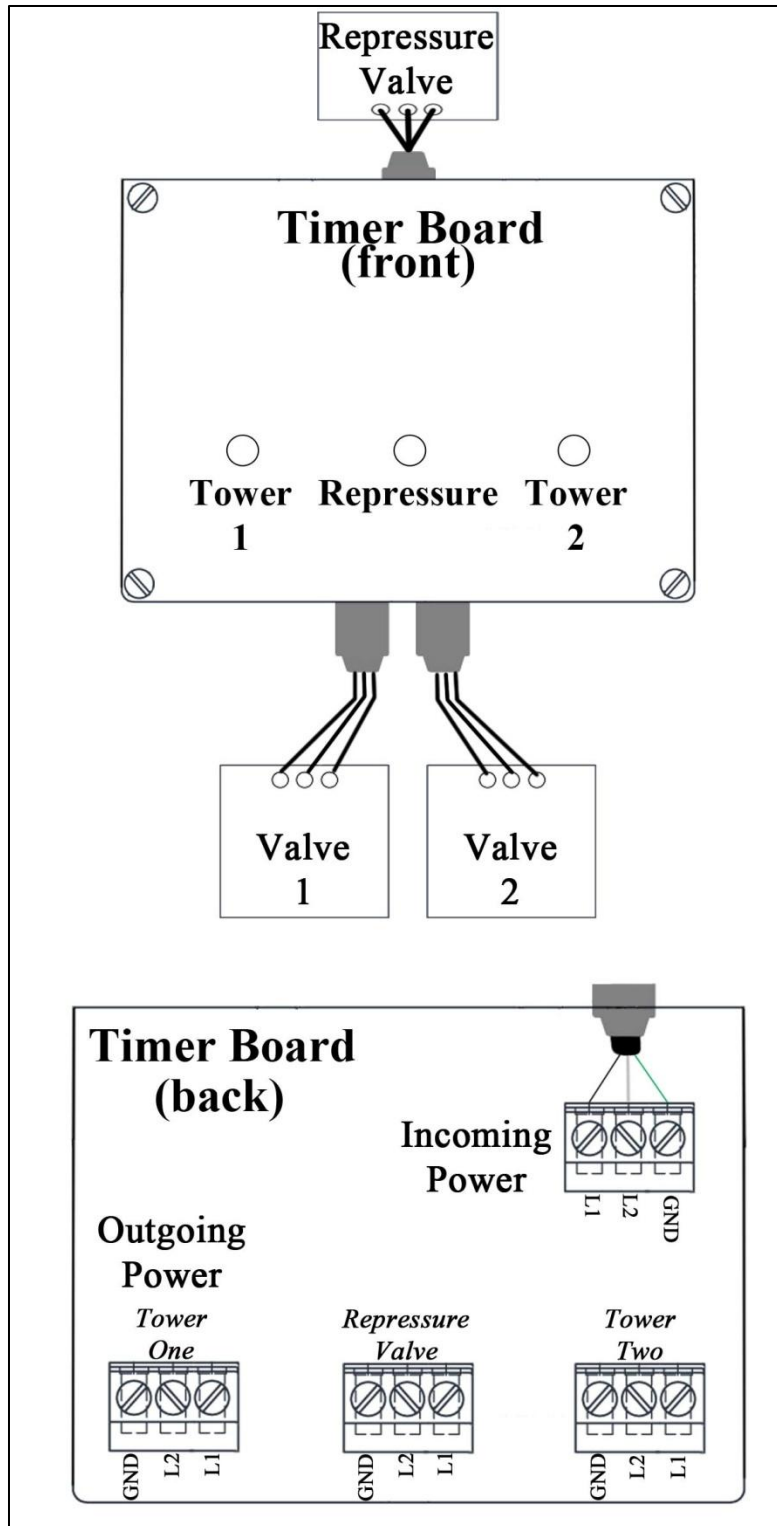


**13. Appendix**

**13.1 Model Number Coding**



### 13.2 Wiring Diagram



## 14. 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 CAS SERIES CO2 ADSORBER / 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 Adsorber / Dryer.*

## 15. Contacting PUREGAS

### 15.1 General

PUREGAS, LLC  
226A Commerce Street  
Broomfield, Colorado 80020

(800) 521-5351

(303) 427-3700

Fax – (303) 657-2205

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

[www.airdryers.com](http://www.airdryers.com)

### 15.2 Sales

(800) 521-5351

Fax – (303) 657-2205

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

### 15.3 Service

(800) 521-5351 (**option 3**)

Fax – (303) 657-2205

### 15.4 Technical Support

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

**DON'T FORGET TO REGISTER YOUR CAS ADSORBER /  
DRYER!**

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

**16. Maintenance Log Sheet**

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

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

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

Procedure	Section	Maintenance Interval (Months)				
		6	12	18	24	30
Visually Inspect CAS for Loose Wiring or Hardware	6.6.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test Consistent Adsorber / Dryer Cycling	8.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visually Verify Cycle Timer has Voltage	8.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Replace Purge Mufflers	10.3		<input type="checkbox"/>		<input type="checkbox"/>	
Replace Filter Elements (If installed)	10.3		<input type="checkbox"/>		<input type="checkbox"/>	
<b>Maintenance Performed by:</b>						
<b>Date of Maintenance:</b>						

**NOTE: COPY OR PRINT THIS PAGE AND KEEP IT WITH THE ADSORBER / DRYER!**

**17. Notes**

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