



15Hp/20Hp Deluxe Compressor-Dryer System

User Manual Installation Instructions



Take your air system into the future with molecular sieve technology used in the Tsunami Regenerative Dryer compressed air drying system.

YOUR SAFETY IS IMPORTANT

Read ALL instructions before you begin the installation of your
Tsunami Deluxe Compressor-Dryer System
Observe and follow all caution and warning instructions

!!CAUTION!!

- Only experienced and certified electricians should wire the Tsunami Deluxe Compressor-Dryer System into electrical panel
- Always wear eye protection when working on Tsunami regenerative dryer or Saylor-Beall compressor
- Use only proper tools and follow all precautions which pertain to the use of those tools
- Make sure all JIC fittings are securely fastened

WARNING

Follow all warning and maintenance guidelines detailed from compressor manufacturer. Failure to follow these guidelines could result in injury, damage or void the warranty of the equipment.

****IMPORTANT****

There is a MANDATORY 6 month maintenance schedule for the regenerative dryer oil coalescing pre-filter, P/N 21999-0202-Z-SP
Failure to follow all maintenance schedules will void all warranties

— use appropriate thread sealant on all fittings unless otherwise specified —

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Congratulations on your purchase of the 15Hp/20Hp Tsunami Deluxe Compressor-Dryer System. We are very pleased that you have decided to use the latest technology to improve your compressed air system.

Your air system, using patented drying technology will provide years of service with little maintenance required.

Thank You.

INSTALLATION INSTRUCTIONS

****SYSTEM PRESSURE MUST BE RELEASED
PRIOR TO INSTALLING COMPRESSOR-DRYER****

Position the compressor in the desired location

****Follow compressor installation instructions for distances from walls and doors****

The system is designed to be moisture-less, however if run in bypass for prolong periods of time, water will collect in tank.

To optimize tank drainage, elevate compressor ½" to 1" on end opposite the compressor tank drain as shown.

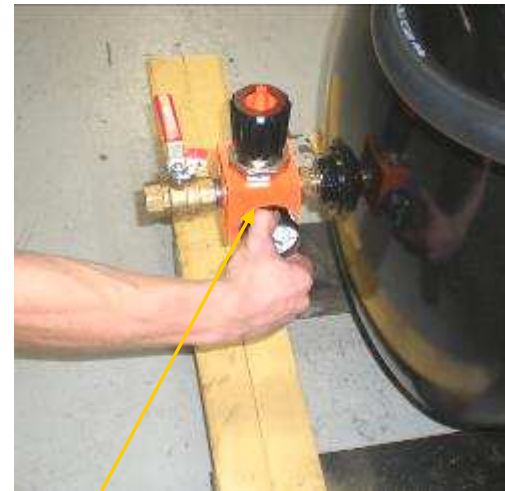


If outlet is desired here
replace tee with cross

Compressor tank
drain is located here.

Step 1 - Mounting the Regulator

Tighten in regulator using thread sealant. Tighten with wrench to orientate as shown. Regulator should be set to 100-120 psi to maximize efficiency.



Install gauge with thread sealant; be
careful to avoid the first two threads

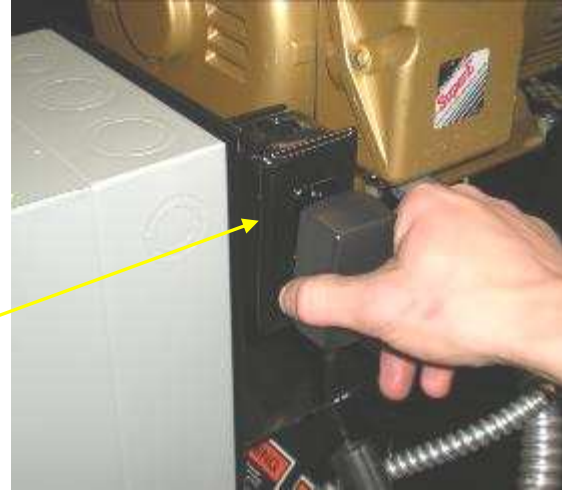
Step 2 - Plug in PLC



Thread in locking plug on controller

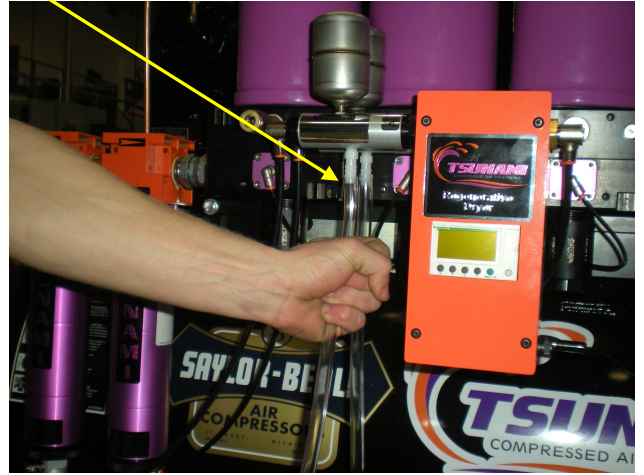
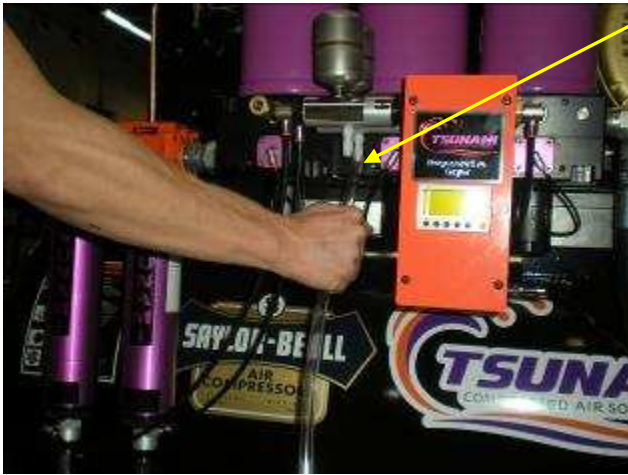
Plug in wall pack into outlet on box.

NOTE: Qualified Electrician must wire single phase 120-220 VAC 50-60 Hz into outlet



Step 3 - Route drain lines for automatic drains

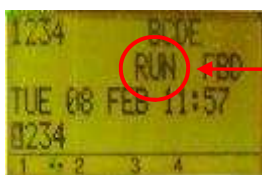
Cut and attach the supplied drain lines and run from each drain to condensate collection container.



NOTE: Check with local law on how to dispose of condensate

Programmable Logic Controller

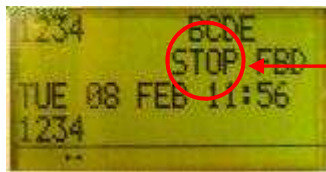
- The PLC used on the Tsunami Regenerative Dryer is pre-programmed and should automatically jump into the run mode once the unit is plugged in to your power supply.
- There are 3 basic display screens: Run Mode, Stop Mode, and Warning mode. The warning mode tells you that it is time to perform your mandatory maintenance on the oil coalescing pre-filter of the dryer



RUN MODE

NORMAL OPERATING CONDITION

- RUN is displayed on the screen
- The little icons on the bottom of the display move in a rotating manner



STOP MODE

PLC needs to be manually shifted to run mode (see below)

- STOP is displayed on the screen
- The little icons on the bottom of the display have stopped rotating



WARNING MODE

Mandatory maintenance is due on the oil coalescing element

- To reset, press and hold in both the left and right arrow buttons for approx. 10 seconds

Step 1:

Press the Menu/OK button to bring up the menu screen.



Step 2:

- Press the down arrow to highlight Run/Stop
- Press the Menu/OK button to enter selection

Step 3:

- Hit the down button until you highlight "NO NONVOLAT INI"
- Press Menu/OK button to enter selection



Step 4:

- PLC should now display the RUN MODE on screen



Maintenance Schedule for All Tsunami Regenerative Dryer Systems

6 month Maintenance: **(Mandatory)**

- Replace the oil coalescing element



P/N 21999-0202-Z-SP
Oil Coalescing Replacement Element

3-5 year Maintenance Program: (Strongly Recommended)

- Replace piston spool valve - one per tower
P/N 21999-0707
- Replace molecular sieve canisters (towers)
P/N 21999-0349



P/N 21999-0707
Piston Rebuild Kit



P/N 21999-0349
Tower Replacement

****SYSTEM PRESSURE MUST BE RELEASED PRIOR TO
PERFORMING MAINTENANCE PROCEDURES****
see pages 6-7 on how to go into bypass mode

Replacing the oil coalescing pre-filter element

Note: Detailed video available on-line at our website www.gosuburban.com

Step 1: Open ball valve on bottom filter housing to release any system pressure



Step 2: Remove drain line and unscrew the filter housing



Step 3: Remove the bottom nut and replace element



Step 4: Screw housing onto filter head and attach drain line. Be sure to close ball valve on the bottom of the filter

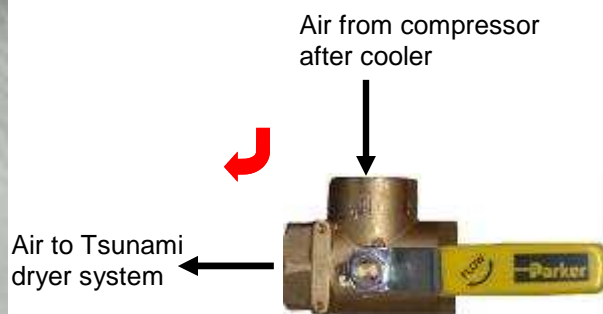
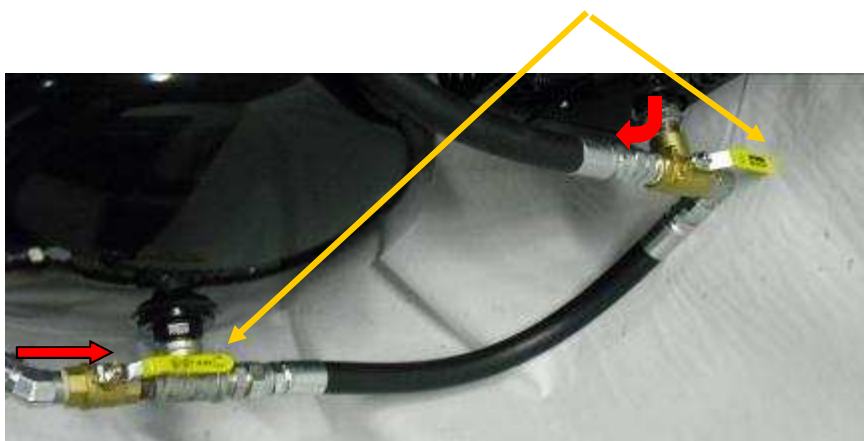


The Tsunami Deluxe Compressor-Dryer System has a bypass system already installed.

Normal Operating Position for Compressor-Dryer Bypass Ball Valves

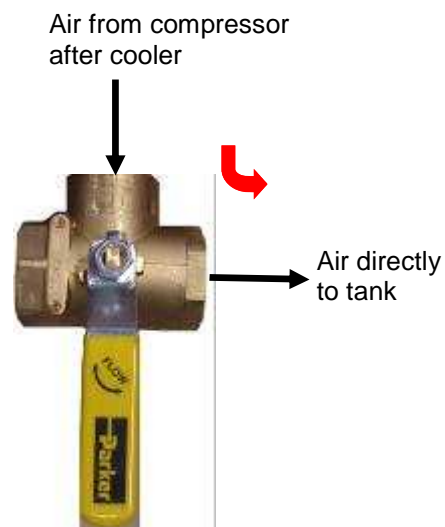
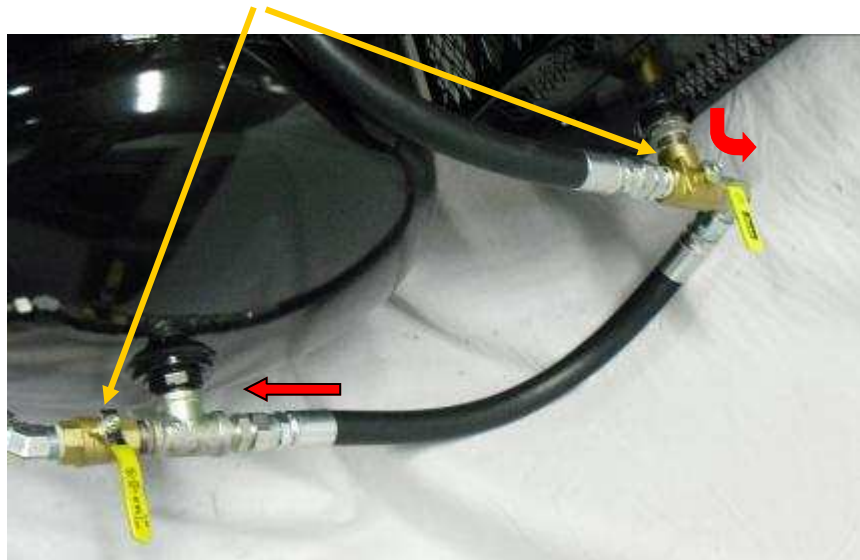
!! Ball valves should be in this position for compressor start up !!

The 3-way ball valve and the dryer outlet ball valve **MUST** be in the positions shown during normal compressor operation. The red arrow shows the direction the air travels when using a 3-way ball valve when the handle is positioned as shown.



Bypass Operating Position for Compressor-Dryer Bypass Ball Valves

The 3-way ball valve and the dryer outlet ball valve will be in the positions shown when bypassing the regenerative dryer. The red arrow shows the direction the air travels when using the 3-way ball valve as shown below.



How to use the Built-in Bypass System

Warning: You **MUST** follow the correct sequence when using the bypass system in order to prevent possible injury to others as well as to prevent damage to the compressor-dryer system.

Go Into Bypass Mode

Step 1

Turn 3-way ball valve into the bypass position as shown.



Step 2

Close the dryer outlet ball valve as shown



Warning: You **MUST** depressurize the dryer system by opening the ball valve on the oil coalescing filter and by inserting a quick connect plug into the test port once in bypass mode. Once the unit is depressurized, close the ball valve on the oil coalescing filter.



Go Back Into Drying Mode

Step 1

Open the dryer outlet ball valve as shown



Step 2

Turn 3-way ball valve into the drying position as shown





Suburban Manufacturing, Inc. warrants this unit to be free from manufacturing defects for a period of one year from the date the unit is shipped from factory according to the following terms:

This unit must be installed and maintained in accordance with the manufacturers' written recommendations and requirements as they exist from time to time.

This unit must be used for appropriate applications.

This unit must not have been altered from its original state.

Any portion of this unit found defective in material or workmanship will be repaired or replaced, at the manufacturers option, without charge for parts or labor, providing the unaltered product is returned to the manufacturer, shipped prepaid, within the two year time period set forth in this warranty and provided further that the customer establishes that the product is defective in its material or workmanship.

This warranty specifically does not apply to:

Any unit which has been altered from its original state by the customer or anyone acting on behalf of the customer other than the manufacturer.

Repairs necessitated by accident, abuse, or failure to use the product in a manner for which it was designed.

Failure by the customer to follow the normal installation, application and maintenance requirements of the manufacturer.

Loss of use of any system of which this unit is a part, loss of time, inconvenience or any other incidental or consequential damages sustained by the customer.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. THIS REMEDY OF REPAIR OR REPLACEMENT UNDER THIS WARRANTY IS EXCLUSIVE AND NEITHER THE MANUFACTURER NOR ITS AGENTS AUTHORIZE ANYONE TO ASSUME FOR THEM ANY OTHER OBLIGATION OF ANY FORM OTHER THAN THE OBLIGATION TO REPAIR OR REPLACE WHICH IS SET FORTH IN THIS WRITTEN WARRANTY. THIS WRITTEN WARRANTY COMPLETELY EXCLUDES THE MANUFACTURERS' RESPONSIBILITY FOR BUSINESS INTERRUPTIONS, LOSS OF PROFITS, PERSONAL INJURY, COSTS OR DELAY, OR ANY OTHER DIRECT OR INDIRECT INCIDENTAL OR CONSEQUENTIAL LOSSES, COSTS, OR DAMAGES. THE CUSTOMER ACCEPTS THIS WARRANTY AS AN EXPRESS CONDITION OF PURCHASE OF THIS UNIT.

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