# **USER MANUAL**



# AFTERCOOLER INSTALLATION

**SET UP | CONFIGURATIONS** 

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For over 35 years, Tsunami Compressed Air Solutions™, has set the industry standard for quality compressed air filtration and drying solutions. While we strive to bring cutting-edge technology to the world of pneumatics, we continue to focus on the core principles that built the foundation of our successful business: quality, value, and world-class customer service.

At Suburban Manufacturing Group, our mission is to build value for our customers by producing quality, innovative, application-based products. Suburban is an engineering driven organization that partners with customers to design and develop unique and specific fluid power products.

Today, we distribute thousands of fluid power solutions worldwide right from our U.S. manufacturing facility located in Monticello, Minnesota.

Suburban Manufacturing Group is an ISO 9001-2015 Certified Manufacturer.

a division of



# **TECHNICAL INFORMATION & SPECS**

### **SPECIFICATIONS**

SPECS	DETAILS
MAXIMUM AIR FLOW	50 CFM
MAXIMUM PRESSURE	290 PSI
MAXIMUM TEMPERATURE	300°F
ESTIMATED APPROACH	5-20°F Above Ambient Temperature
TEMPERATURE	
PRESSURE DROP	1 PSI *at 125 PSI Inlet Pressure
VOLTAGE REQUIRED	110 / 120 VAC, 50 / 60 HZ
CURRENT DRAW	0.4 AMPS
WEIGHT	27.5 LBS



### **MOUNTING OPTIONS & INSTALLATION NOTES**

### WHAT'S INCLUDED

- Aftercooler
- Wall brackets
- 4 bolts

- 4 lock washers
- 4 washers
- Mounting template

### **MOUNTING OPTIONS**

Tsunami's Aftercooler has numerous mounting options to best fit your available space. The various mounting configurations include estimated approach temperatures. Determine desired mounting orientation; this will affect Aftercooler performance.

PERFORMANCE CLASS	GOOD	BETTER	BEST
DRYER	Dimensions:	Dimensions:	Dimensions:
ORIENTATION	22.5" x 11.75" x 10.25"	22.5" x 11.75" x 12.5"	22.5" x 7.25" x 14.25"
	Dimensions:	Dimensions:	Dimensions:
	11.75" x 28" x 10.25"	11.75" × 28" × 12.5"	7.25" × 28" × 14.25"
APPROACH TEMP WITH 250°F INLET TEMP	15-20°F	10-15°F	5-10°F

### WHAT'S NOT INCLUDED

Use appropriate hardware for mounting brackets to the wall; **MOUNTING HARDWARE IS NOT INCLUDED.** 

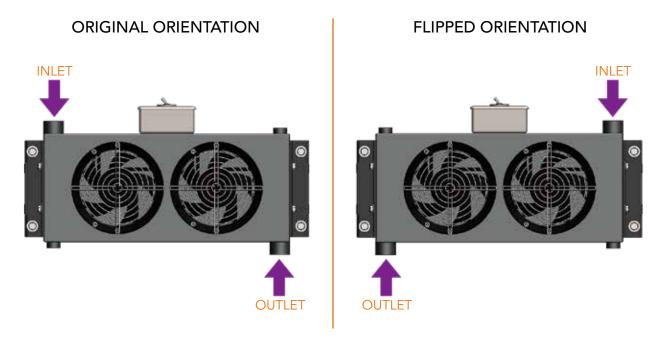
- Ensure the selected hardware can support the weight of the Aftercooler.
- Recommended bolt size for mounting brackets: 1/4" or 5/16" diameter.

### **ADDITIONAL NOTES**

- Ensure the mounting wall can support the weight of the Aftercooler (27.5 lbs).
- Mark mounting locations on the wall using the supplied template. If necessary, pre-drill holes in wall for the hardware.
- Secure brackets on the wall, with each bracket having two bolts minimum.

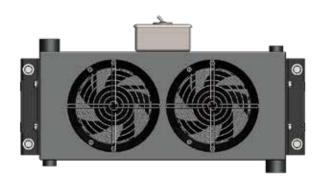
# **INSTALLATION ORIENTATION**

If desired for your Aftercooler installation, the heat exchanger of the Aftercooler can be flipped to change which sides the inlet and outlet ports are located. This will need to be done prior to installation.

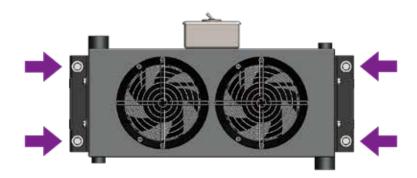


### **HOW TO FLIP ORIENTATION OF HEAT EXCHANGER**

**STEP 1:** Place Aftercooler on a table, with heat exchanger down.

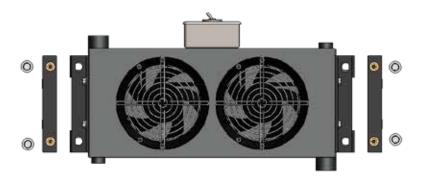


**STEP 2:** Remove 4x bolts, using 1/2" wrench.



# **INSTALLATION ORIENTATION**

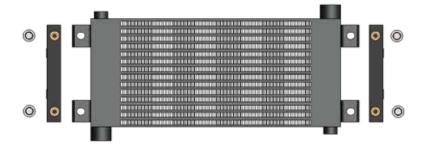
**STEP 3:** Remove tubes from the heat exchanger. Set bolts and tubes next to heat exchanger.



**STEP 4:** Remove shroud and set aside.



**STEP 5:** Rotate heat exchanger so inlet and outlet ports flip locations.



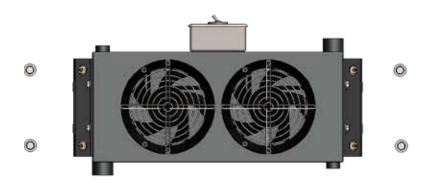
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# **INSTALLATION ORIENTATION**

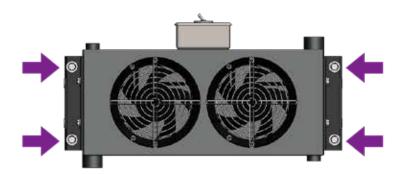
**STEP 6:** Set tubes inside of heat exchanger. Confirm holes for wall brackets are facing towards the outside of the heat exchanger.



**STEP 7:** Set fan shroud on heat exchanger, aligning edges to heat exchanger.



**STEP 8:** Secure fan shroud, heat exchanger, and tubes with bolts using 1/2" wrench.



**STEP 9:** Verify hardware is tight. Proceed with wall mounted installation.

### **INSTALLATION INSTRUCTIONS**

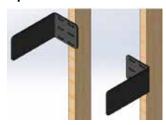
To optimize the performance of the Aftercooler, it's vital to provide unrestricted air flow for the ambient air to pass through. The Aftercooler **must** be at least 3" (inches) from other walls and equipment.

\* **Note:** Obstruction to cooling air will affect performance.

### AFTERCOOLER INSTALLATION

- **STEP 1:** Determine desired mounting orientation.
  - Vertical or Horizontal
  - 16" or 24" stud spacing

Option 1: Horizontal 16"



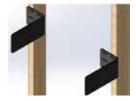
Option 2: Horizontal 24"



Option 3: Vertical single stud



\* **Note:** Brackets can be flipped to accommodate location and flow direction change from left to right to right to left



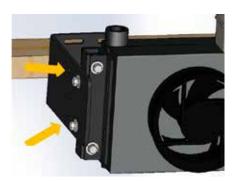
- STEP 2: Using the supplied template, mark mounting locations on the wall.
- STEP 3: If necessary, pre-drill holes for the wall bracket hardware (not provided).
- **STEP 4:** Secure brackets to the wall.
- **STEP 5:** Align Aftercooler with preferred holes in brackets.
  - Assistance may be required to lift and hold Aftercooler in place for mounting.



- 1. Good Performance: Parallel to wall, 4.3" cooling air clearance.
- 2. Better Performance: Parallel to wall, 6.6" cooling air clearance.
- 3. Best Performance: Perpendicular to wall, unobstructed cooling air clearance.

# **INSTALLATION INSTRUCTIONS**

**STEP 6:** Secure Aftercooler to both wall brackets with supplied hardware.



If needed, loosen wall brackets for minor adjustment of location of Aftercooler and to properly align wall brackets to Aftercooler.

- \* **Note:** Make sure Aftercooler is level.
- **STEP 7:** Tighten all hardware to secure wall brackets and Aftercooler.
- STEP 8: Plumb Aftercooler into the compressed air system. Use appropriate thread sealant.
- **STEP 9:** Plug in Aftercooler to appropriate electrical outlet. Turn on fan switch.

### **MOUNTING CONFIGURATION OPTIONS**

PARALLEL	PERPENDICULAR
16in Stud, Parallel to Wall	4 16in Stud, Perpendicular to Wall
2 24in Stud, Parallel to Wall	3 24in Stud, Perpendicular to Wall
3 Vertical, Parallel to Wall	Vertical, Perpendicular to Wall

# **TROUBLESHOOTING**

PROBLEM	CAUSE	SOLUTION
Outlet air is too hot	• Fans are not on	Turn on fans Check outlet for power
	Over maximum flow rate	Reduce flow rate through     Aftercooler
	Inlet temperature over maximum	Reduce inlet air temperature
Insufficient air pressure downstream	Blockage in Aftercooler	Depressurize and check inlet / outlet ports for blockage

### HAVE MORE QUESTIONS? CHECK OUT THESE INSTALLATION VIDEOS.

HOW TO SWITCH HEAT EXCHANGER ORIENTATION



Step-by-step instructional video on how to flip the direction of the heat exchanger before mounting the aftercooler.

Written instructions: pgs 5-7

### **INSTALLATION**



Step-by-step installation video on how to install the aftercooler onto your rig's system.

Written instructions: pgs 8-9

### **CONTACT**



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