



# COMMAND AIR<sup>®</sup> 500

**PORTABLE AFTERCOOLER**



## **MODEL CA-500 AFTERCOOLER OPERATION MANUAL**

Nu-Ice Age, Inc. • Jackson, MI USA • Customer Service: 517-990-0665 • nuiceage.com

# Aftercooler Operation Manual

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## 1.0 INTRODUCTION

Suitable for most blasting applications, the Command Air 500 efficiently cools, filters and dries the hot moist air produced by air compressors. Built tough for portable applications, the Command Air 500 features self-purging automatic drains, robust steel frame and airless tires for easy mobility.

### APPLICATIONS:

- Dry Ice Cleaning
- Sand Blasting
- Soda Blasting
- Any other equipment requiring cool, dry air for operation

## 1.1 WARRANTY

Command Air Aftercoolers are guaranteed to be free of defects in material and / or workmanship for two (2) Years from the date of shipment to the buyer. The warranty shall cover 100% of all parts and labor with the exception of misuse, abuse, or neglect. The warranty also does not cover consumable items such as filters, drains and separators.

The manufacturer will at it's option repair, replace or issue credit for the value of any defective aftercooler. Failure to follow proper operation and maintenance procedures described in this manual may limit or void this warranty.

Buyer accepts all responsibility for compliance with any / all Local, State and Federal Laws or Regulations including Regulations of Foreign Governments.

No equipment shall be returned without a Return Authorization Number from our customer service department. Upon evaluation and determination of warranty, replacements or repairs will be sent to the buyer. If a replacement is needed immediately, a Purchase Order is required to cover the cost of the product until the warranty is determined.

The warranty is limited to replacing any goods that are proved to be defective and the manufacturer in no event shall have any liability for paying incidental or consequential damages including and without limitation, damages resulting in personal or bodily injury or death, or damages to, or loss of use of any property. Notwithstanding any of these terms and conditions, the warranty set forth shall apply in connection with any sales of goods, services or design by the manufacturer and are in lieu of all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose.

## 1.2 SAFETY PRECAUTIONS

As with all equipment using a high pressure air source, proper eye and ear protection, along protective gloves, are required while operating the aftercooler. Do not touch inlet piping without protective gloves, air coming in from the compressor can be extremely hot and could cause minor burns. Review this operation manual prior to operation to ensure proper setup and safety procedures are followed.

## 1.3 MACHINE SPECIFICATIONS

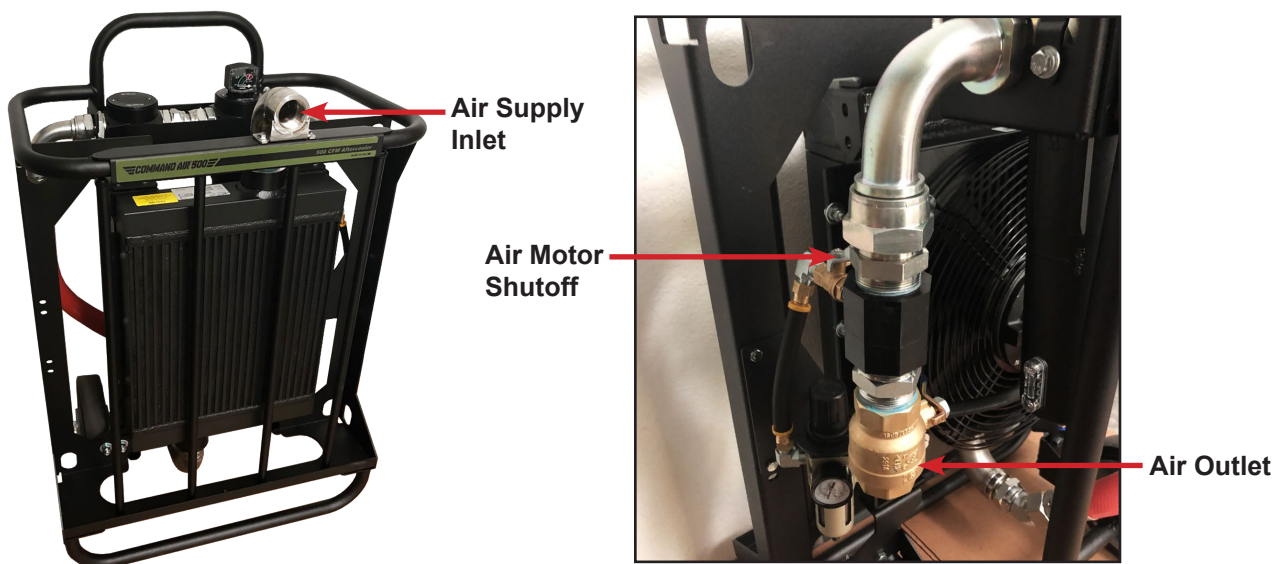
### CA-500 Aftercooler Specifications:

- Pressure Rating: 250 psi MAX
- Flow Capacity: 500+ SCFM @ 250 PSI
- Filtration: Coalescing filter to .7 micron
- Max Inlet Temperature: 250°F (121°C)
- Fan Motor Supply: 25 CFM @ 35 psi MAX
- Moisture Drainage: Self-purging, automatic
- Dimensions: 45" (1143 mm) H x 32½" (826 mm) W x 19" (483 mm) D
- Weight: 180 LB (82 KG)
- Inlet Size: 1.5" NPT F
- Outlet Size: 1.5" NPT F

## 2.0 OPERATION

### 1. Connecting Air Supply and Equipment

- Supply Hose Fitting: Connect air supply hose fitting (not included) to the 1.5" female NPT fitting (Air In). Supply hose should be rated for the outlet pressure and temperature of your air compressor. A shorter hose is recommended, the aftercooler should be located as close to the compressor as possible.
- Outlet Hose Fitting: Connect the outlet hose fitting (not included) to the 1.5" female NPT ball valve (Air Out). Connect the outlet hose to your equipment.
- An outlet valve is required on the air supply so the aftercooler can be isolated from the air pressure in case of emergency
- Full flow valves and fittings, along with hose whip checks are recommended



### 2. Pressurizing the Aftercooler

Always ensure all connections are secure and the outlet valve is closed prior to pressurizing, then activate your air compressor. Open the compressor outlet valve slowly to pressurize the aftercooler.

## 2.0 OPERATION *(continued)*

### 3. Air Motor Adjustment

The fan motor will require adjustment based on the ambient temperature. In environments with a temperature of 80° F or higher, set the motor at 35 psi. In cold environments the fan can be adjusted very low or even at zero when it is near or below freezing. For most environments the fan motor should be set between 20 and 35 psi. Set the motor operating pressure by turning the knob on the air pressure regulator connected to the fan motor. Air pressure to the fan can be monitored on the gauge located behind the motor.



### 4. Pressurizing Blaster or Other Equipment (Air Out)

Ensure the outlet connection on the aftercooler and the inlet connection on your equipment are secure. Open the aftercooler outlet valve slowly to pressurize your equipment. Equipment can be used immediately after pressurizing, the aftercooler will provide cooled and filtered air instantly, no warm up time is required.

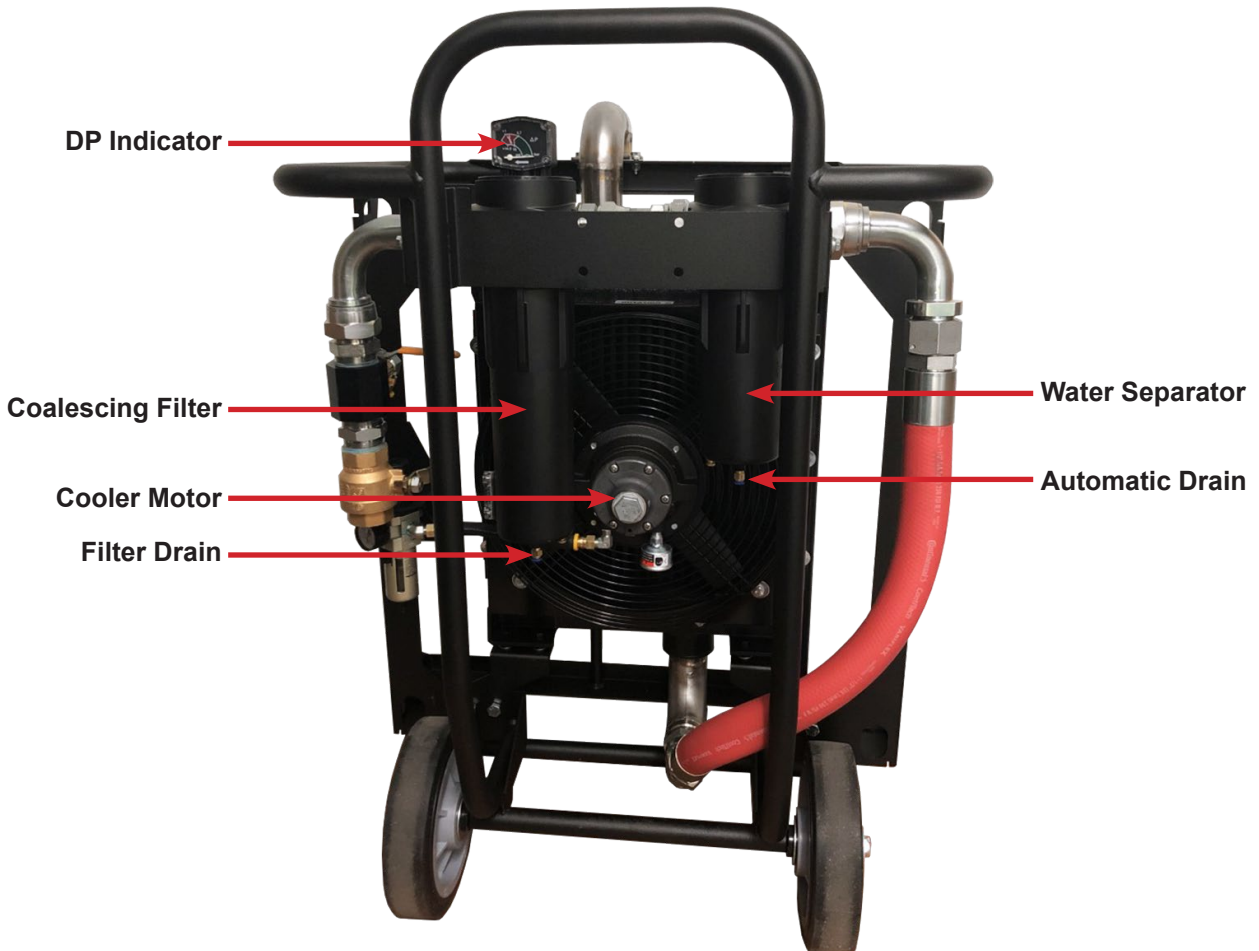
### 5. Cooling Operation

The outlet piping and hose from the aftercooler should be cool to the touch even after hours of operation. If it is hot or warm, increase the air motor pressure to reduce the air temperature. Do not touch inlet piping as air coming in from the compressor can be extremely hot and could cause minor burns.

Water will automatically drain from the water separator on the back of the aftercooler. A drip pan is recommended for indoor use. The amount of water drainage will depend on temperature and humidity levels.

To deactivate the aftercooler, first shut down your blasting equipment, then close the aftercooler outlet valve. Shut down the air compressor to depressurize the aftercooler.

## 3.0 MAINTENANCE & PARTS



### Coalescing Filter

- Check the differential pressure (DP) indicator on the top of the coalescing filter periodically to view the status of the filter element. The indicator will show red when it is time to change the filter element.

### Water Separator

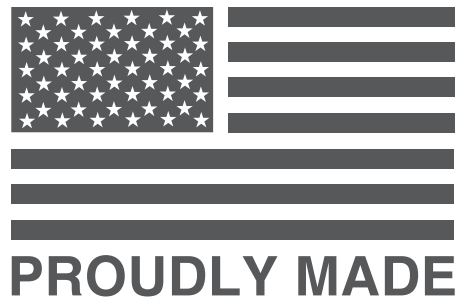
- The water separator is for the most part maintenance free, however it should be inspected for proper operation. If it is not separating moisture from the air it may need to be replaced or the drain may be clogged.

### Moisture Drains

- The two drains may be cleaned or replaced as needed. The automatic drain on the water separator will drain the most water. If it stops draining for an extended period of time, check for a clogged drain and clean.

### Cooler & Air Motor

- The air motor powering the cooler is oilless and should not require maintenance. The fan and vents on the cooler should be inspected regularly and will require cleaning when dirty. The fan unit may be cleaned with compressed air or a power washer. If power washing, be sure to spray the unit parallel to the direction of the fan blades in order to avoid damage.



**SAVE THESE INSTRUCTIONS**



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