Compressed Air Cooler

CE

CONDUX®

IMPORTANT SAFETY INSTRUCTIONS

Read and understand all procedure and safety instructions before using a Condux Compressed Air Cooler. Observe all safety information on this page and note specific safety requirements as explained by procedures called out in this manual. Failure to follow these instructions could result in serious personal injury or death.

ADVERTENCIA:

Favor de leer y comprender todas las instrucciones de operaci—n y seguridad antes de usar la m‡quina. Si Ud. no comprende las instrucciones favor de consultarle a su jefe.

!WARNING: Read and understand all procedure and safety instructions before using the Condux® Compressed Air Cooler. Failure to do so may result in serious personal injury or death.

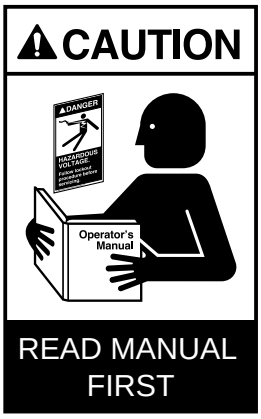
!ADVERTENCIA: Favor de leer y comprender todas las instrucciones de operación y seguridad antes de usar el Condux® Compressed Air Cooler. Si Ud. no comprende las instrucciones favor de consultarle a su jefe.

!CAUTION: Wear personal protective equipment: hard hat, safety glasses, safety shoes, and leather work gloves.

!WARNING: Ensure no personnel are in the destination access vault during the blowing operation. Severe personal injury could result.

!WARNING: Forced air creates flying debris. Always wear personal protective equipment. Severe personal injury could result.

!WARNING: Inlet pipe is HOT. Heat transfer surface (grill) is HOT. Severe personal injury could result from touching the inlet pipe or heat transfer surface.



Save this user's guide for future reference.

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If you have questions on:

SAFETY • OPERATIONS • APPLICATIONS

CALL 1-800-533-2077 or 1-507-387-6576

General Information & Specifications

1.

The Compressed Air Cooler from Condux International cools compressed air from a maximum temperature of 250¡F (121¡C), to within 5¡F (3¡C) of the ambient temperature (Figure 1). The compressed air cooler is intended for use with the Condux Fiber Optic Cable Blower to help prevent heat damage to the fiber optic cable during installation (Figure 2).

Figure 1. Compressed Air Cooler

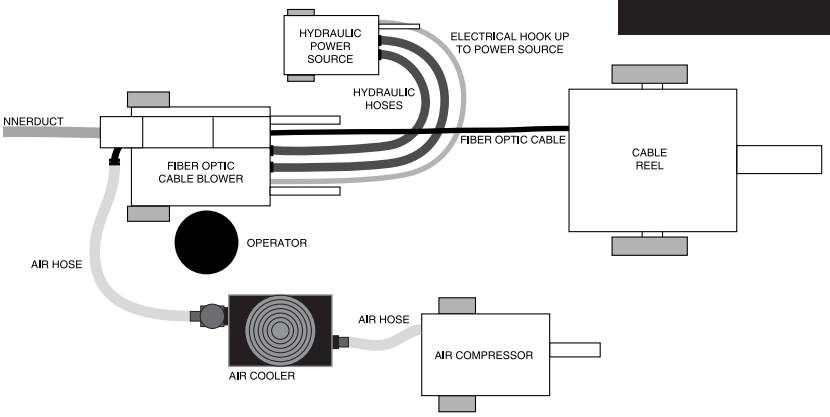

Figure 2. Typical Set-up with a Fiber Optic Cable Blower.

A. SPECIFICATIONS

1. Minimum ambient operating temperature: 41¡F (5¡C).
2. Maximum ambient operating temperature: 140¡F (60¡C).
3. Minimum inlet operating temperature: 41¡F (5¡C).
4. Maximum inlet operating temperature: 250¡F (121¡C).
5. Maximum operating pressure: 135 psi (9.3 bar).
6. Always use in a well lit area with a light intensity of at least 200 lux.
7. Machine weight: 136 lbs (61.7 kg).
8. Maximum noise reading: 90.7 dbA.
9. Maximum flowrate: 400 SCFM (11326 SLM).
10. Only portable air compressors with its own isolation and dump valve must be used and must be locked in the closed position when changing hoses. The relief valve on the portable air compressor should not be rated over the maximum operating pressure of the air cooler.

Set-up and Operation

2.

A. PLACE AIR COOLER

Place air cooler on flat and level surfaces on a slope less than 10 degrees, which are free of heavy dust and debris to avoid flying debris emitted from the cooling fan. Never place the air cooler below gantries, power lines or walkways where there might be a risk of falling objects.

B. NEVER STEP ON AIR COOLER

The air cooler must not be used as a step and hoses which are connected to the cooler must not be located where personnel will be at a risk of tripping over them.

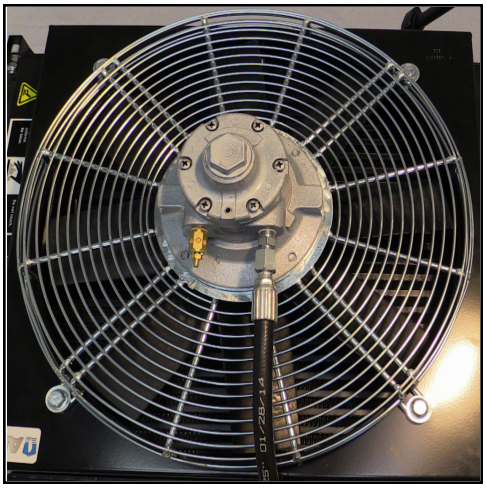

Figure 3. Blade free of obstruction

Figure 4. Open Lockout Valve

C. CHECK FAN

Check fan blade before set-up to make sure it is free of obstruction (Figure 3). Blade should rotate counterclockwise when Compressed Air Cooler is running.

!CAUTION: Never lean over or look down into the cooling fan when operating the air cooler.

D. ADJUST FAN MOTOR

The air cooler is equipped with an OSHA approved lockout valve. In the closed position, the valve blocks air to the pneumatic fan motor. A padlock can be placed on lockout valve to prevent unauthorized usage. / L I W ock Ku slide to unlock (Figure 4).

E. ADD LUBRICANT FOR FAN MOTOR

Remove lubricator shatter guard by pushing it up and turning clockwise. Remove reservoir. Fill lubricator reservoir with SAE 10 weight $ L U 7 R R O 2il. Replace reservoir and shatter guard (Figure 5).

F. CONNECT HOSES

Secure compressor hose to inlet pipe on Compressed Air Cooler. Secure Fiber Optic Cable Blower hose to outlet pipe on Compressed Air Cooler (Figure 6).

!WARNING: System under pressure. Use safety clips on all pneumatic hose connections. Always wear personal protective equipment.

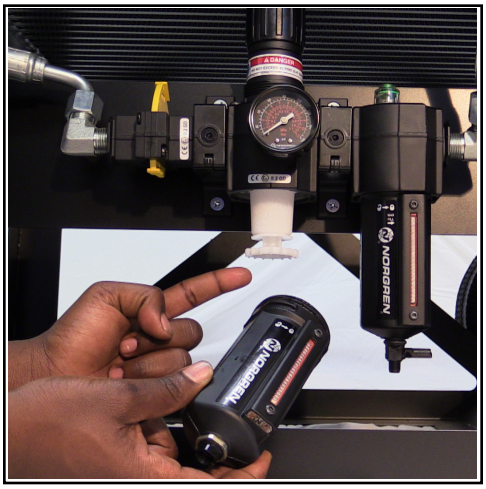

Figure 5. Add Lubricant and Replace Reservoir

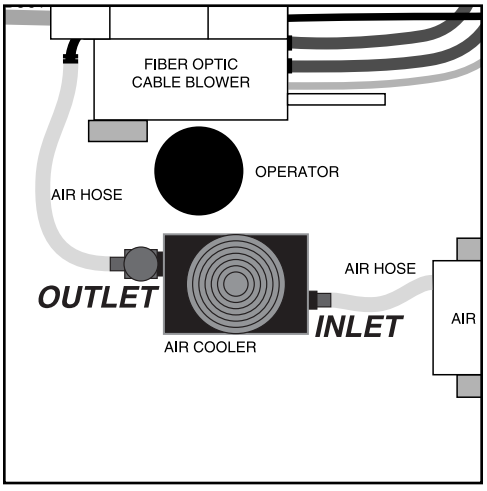

Figure 6. Connect Hoses

G. OPERATE
Start air compressor.

H. ADJUST FAN MOTOR PRESSURE

Turn clockwise to increase pressure or counterclockwise to decrease pressure. Fan motor pressure should be 35 psi (2.4 bar). When reducing pressure, first set pressure below desired level and slowly increase pressure until desired level is achieved. Once proper pressure level is set, S X V K N Q R E W R pressure and V H W (Figure 7).

!CAUTION: Operate pneumatic fan motor at 35 psi (2.4 bar). Operating Compressed Air Cooler above 35 psi (2.4 bar) can cause damage to unit.

I. ADJUST FAN MOTOR LUBRICATOR
Lubricate fan motor at approximately one drop SAE 10 weight detergent oil per minute. Turn oil adjustment V F U H Z (the small one) counterclockwise to increase and clockwise to decrease oil delivery. Monitor unit for excess oil drainage or slow performance. Adjust oil delivery accordingly X V L Q J D O O H1 R 2 U R Y E G H G (Figure 8).

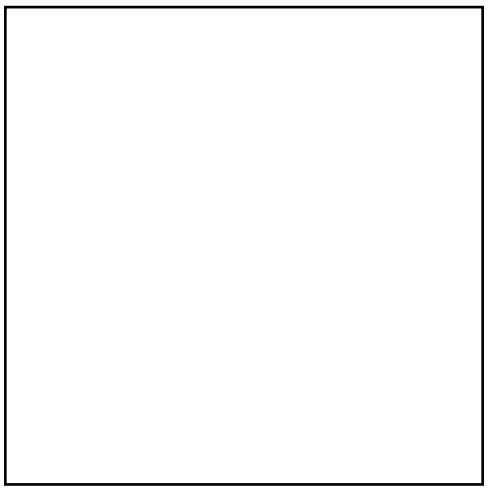

Figure 7. Adjust Pressure

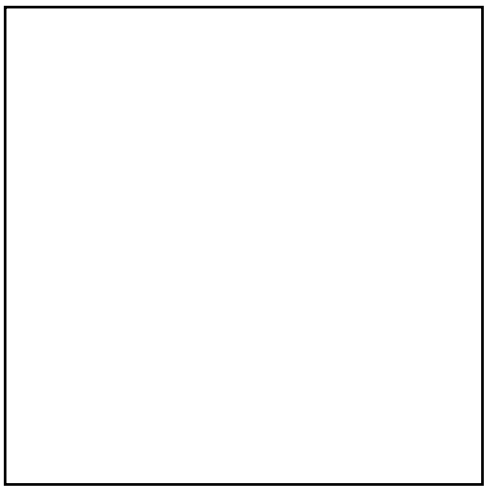

Figure 8. Adjust Lubricator

!IMPORTANT: When adjusting the lubricator, the valve only has to be turned 1/8 of a turn, it is very, very sensitive. If it is turned farther, oil will blow out of the top of the fan. Operator wants only 1 drop of oil per minute.

J. MONITOR
Continue to monitor air pressure and oil delivery to pneumatic motor (Figure 9).

!WARNING: Inlet pipe is HOT. Touching inlet pipe could result in serious personal injury.

!WARNING: Heat transfer surface (grill) is HOT. Touching the heat transfer surface could result in serious personal injury.

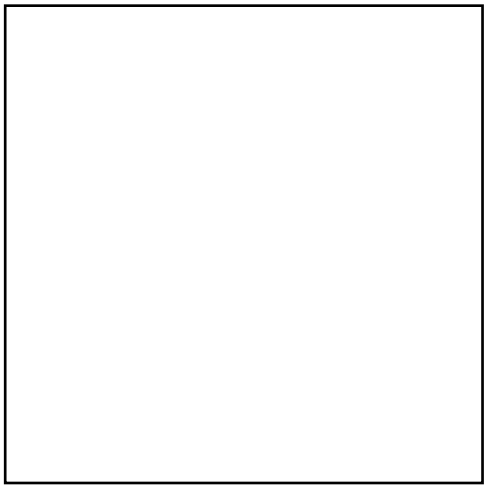

Figure 9. Monitor Fan Motor Air Pressure and Oil Delivery