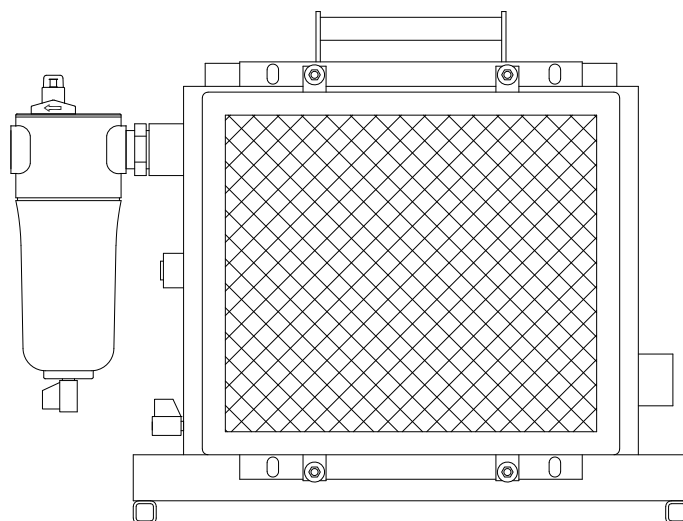


**ASSEMBLY, OPERATION AND MAINTENANCE MANUAL
FOR
COOL PAK
AFTERCOOLER / FILTER COMBO
MODEL: CP-185**



READ ALL INFORMATION IN THIS MANUAL BEFORE OPERATING THE COOL PAK.

DO NOT REMOVE, REPAIR, OR REPLACE ANY ITEM ON THIS SYSTEM WHILE IT IS PRESSURIZED.

NEVER OPERATE THIS SYSTEM ABOVE THE RATED OPERATING CONDITIONS. OPERATION ABOVE SPECIFIED CONDITIONS WILL RESULT IN DECREASED PERFORMANCE, POSSIBLE DAMAGE TO THE UNIT AND/OR PERSONAL INJURY.

A Cool Pak is a portable system consisting of an air-cooled trim cooler and a separator/filter. Wet warm air enters the trim cooler where it is cooled to a temperature approaching ambient. Water is condensed out during this cooling process. The saturated air and the liquid water proceed to the inlet of the separator/filter where the liquid water is removed. The process air out of the system is ready for use. Note: For critical abrasive blasting and painting applications where no liquid can be tolerated at the point-of-use, a dryer must be used.

2.1 INLET CONDITIONS

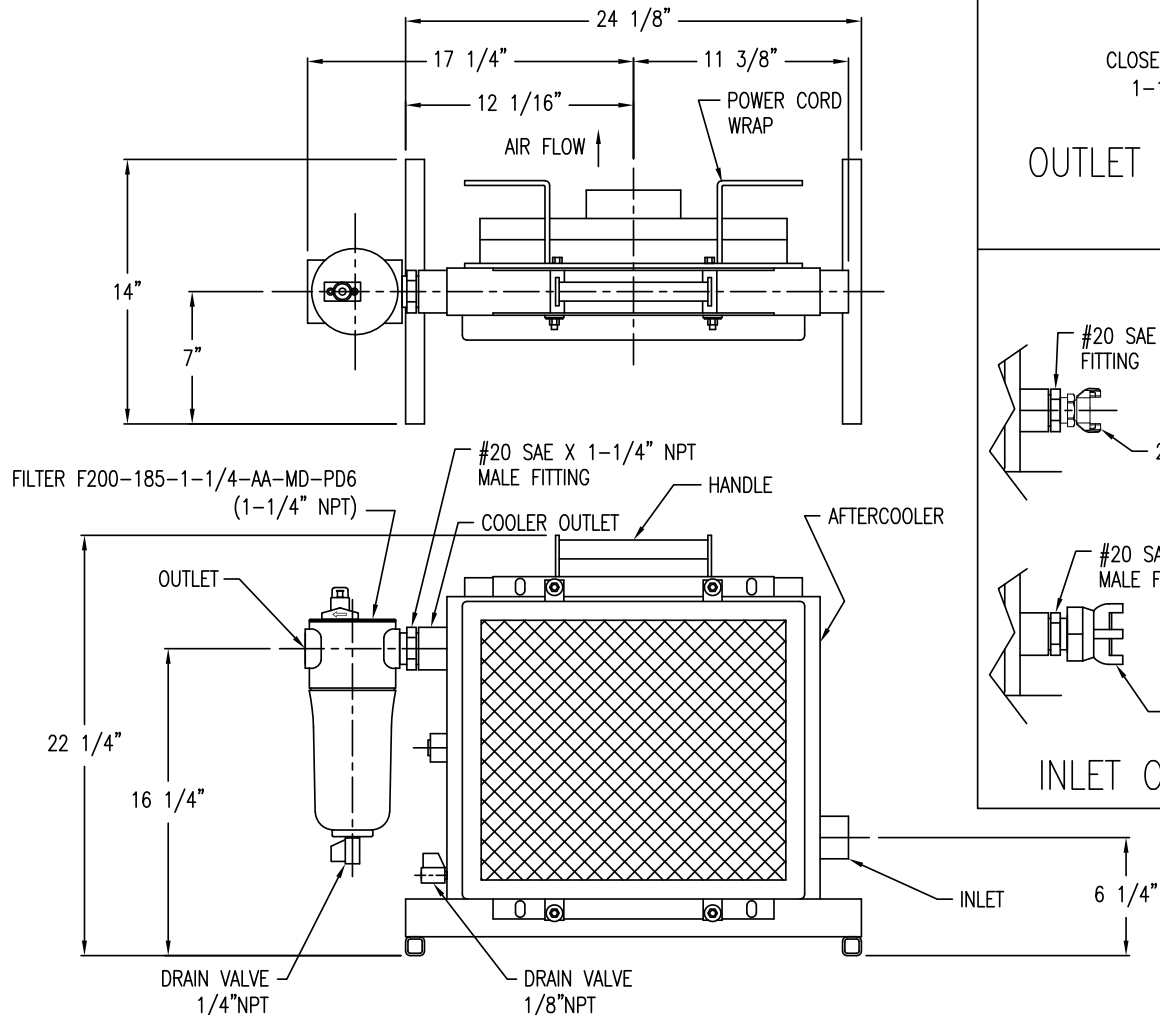
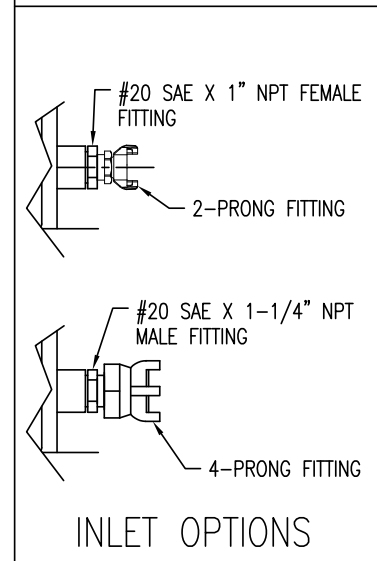
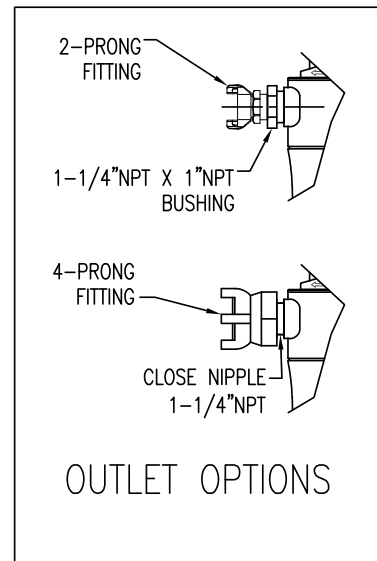
The CP-185 Cool Pak is rated for 185 SCFM at 100 PSIG, 200° F into the trim cooler [based on a 2° F approach]. Approach temperatures will vary with changes to the inlet conditions (flow, pressure, temperature) and the ambient temperature.

The aftercooler maximum inlet temperature is 250° F.
 The filter and piping maximum temperature is 225° F.

2.2 DIMENSIONS

NOTES:

- 1) SYSTEM RATING: 185 SCFM @ 100 PSIG @ 200°F (BASED ON A 2° F APPROACH).
- 2) MAXIMUM WORKING PRESSURE:
 COOLER: 250 PSIG @ 250°F
 FILTER: 250 PSIG @ 250°F
 HOSE COUPLING: 150 PSIG @ 200°F
- 3) AFTERCOOLER MOTOR: 12VDC W/ 50 FT 12-2 AWG POWER CORD.
- 4) COALESCING FILTER: 25 MICRON.
- 5) APPROXIMATE WEIGHT OF UNIT: 68 LBS.
- 6) INLET/OUTLET CONNECTIONS: 2-PRONG AND 4-PRONG HOSE COUPLINGS W/FITTINGS INCLUDED. CUSTOMER INSTALLATION REQUIRED.
- 7) USE PIPE THREAD SEALANT ON ALL NPT FITTINGS.
- 8) ROCK GUARD, HANDLE AND CORD WRAP ARE POWDER COATED WHITE.



3.1 LOCATE ITEMS SUPPLIED WITH CP-185

Cool Pak ships with the the following items for customer installation:

- (1) F200-185-1-1/4-AA-MD-PD6 filter
- (2) 2-lug hose fitting x 1" NPT male
- (2) 4-lug hose fitting x 1-1/4" NPT female
- (2) SAE #20 x 1-1/4" NPT male fitting
- (1) SAE #20 x 1" NPT female fitting
- (1) 1-1/4" NPT close nipple
- (1) 1-1/4" NPT x 1" NPT bushing
- (1) power cord

3.2 INSTALL FILTER

Use (1) SAE #20 x 1-1/4" NPT male fitting to install the filter on the outlet of the cooler. Thread the side of the fitting with the O-ring into the cooler and tighten. Apply pipe thread sealant on the other end of the fitting and install the filter housing. The arrow on the filter should point away from the cooler. See SECTION 2.2.

3.3 INSTALL HOSE FITTINGS

Determine if 2-prong or 4-prong hose fittings are required. Locate and install fittings as shown in SECTION 2.2. Note that the fitting ends that have o-rings thread into the cooler (no pipe thread sealant required).

3.4 PLUG POWER CORD INTO COOLER MOTOR**4.1 OPERATION**

The simple design of the system allows for easy operation. The system requires daily filter draining and periodic cooler draining to ensure peak performance.

4.1-1 DAILY FILTER DRAINING

The accumulated water and oil solution in the bottom of the filter should be drained at least once every 4 to 8 hours (or as required based on conditions).

CAUTION

If the filter is not drained regularly, it may become flooded and the accumulated liquid may enter the air system and cause damage to downstream equipment.

4.1-2 PERIODIC COOLER DRAINING

The accumulated water and oil solution in the bottom of the cooler should be drained periodically to prevent the cooler from becoming flooded.

IMPORTANT

The drain solution may contain lubricants. Comply with all applicable regulations concerning the disposal of these chemicals.

4.2 START UP

SLOWLY pressurize the air system. Allow some air to bleed through the manual drain valve. Once the system starts to pressurize, the manual drain valve can be closed. The Cool Pak is now in operation.

5.1 DAILY INSPECTION

The following procedures should be performed daily:

- Check the operating conditions, ambient temperature and inlet pressure.
- Monitor the unit to make sure it is operating properly.
- Test separator/filter drain for proper draining.
- Check the pressure differential indicator on separator/filter. If the differential pressure is unacceptable, replace the elements.
- Visually check the unit piping for damage.

5.2 SCHEDULED MAINTENANCE**12 MONTHS**

- Replace the separator/filter element
- Clean the exterior of the pre-cooler

24-60 MONTHS

- Periodically the pre-cooler core should be cleaned internally if the process air contains excessive amounts of lubricating fluids.

5.3 CLEAN OUTSIDE OF PRE-COOLER CORE

The core should be cleaned regularly. Accumulation of dirt or other contaminants such as oils will greatly reduce the efficiency of the pre-cooler.

Normal accumulation of dirt can be removed by blowing the core off with compressed air. If the core becomes contaminated with oil-laden particles, it can be steam cleaned. **Clean with extreme care as the aluminum fins can be easily damaged.**

5.4 REPLACING SEPARATOR/FILTER ELEMENT

Shutdown the air system and open the filter drain valve to allow the unit to depressurize completely.

Disconnect drain line (if installed).

Remove filter bowl by turning it counterclockwise (as viewed from below). Pull element from locator. Set bowl aside for use later.

Remove new element from packaging and make sure o-ring is in place on element end cap. See **SECTION 6.1** for replacement element part number.

Install new element by pushing onto element locator on filter head.

Inspect the head to bowl o-ring for nicks and/or cracks. If nicks or cracks are present, replace the o-ring. Re-install the o-ring in the filter head. Check to make sure that the o-ring in the head is in the proper position. Thread filter bowl into filter head and tighten with strap wrench. Do not over tighten. Overtightening could damage filter bowl or make it difficult to remove.

Make sure the ball valve on the bottom of filter is closed.

The Cool Pak is now ready for use.

6.1 REPLACEMENT PARTS

DESCRIPTION	PART NO.	QTY
DC Motor for Aftercooler	26-7488	1
Separator/Filter:	-	-
Replacement element	26-7866	1
Differential Pressure indicator	84-10125	1
head to bowl O-ring	475-00242	1
Manual Drain Valve	84-10852	1
Drain valve for cooler	14-2734	1
Parts Kit: 2-Lug couplings, 4-Lug couplings & fittings	34-1004	1
Power cord	34-1005	1
Male power plug for DC motor	34-1006	1

6.2 HOW TO ORDER PARTS

To order parts contact your local VAN AIR representative, the representative that sold the dryer, or the factory.

When ordering parts, have the system model number ready.

The Service Department can be reached by calling 888-606-9303 or faxing 814-774-3482. Hours are 8:00 AM EST to 5:00 PM EST, M-F.

PREPARATION FOR STORAGE

SECTION 7

Shut off the air supply to the Cool Pak and open the filter drain valve to completely depressurize the system.

Open the cooler drain valve to drain all accumulated liquid in the cooler.

Disconnect the inlet and outlet air hoses.

Disconnect the power cord from the 12V power source and wind the cord on the cord wrap brackets.

STORAGE

Store the Cool Pak in a location that is free from extreme humidity and corrosive gasses, which can cause damage to the unit.