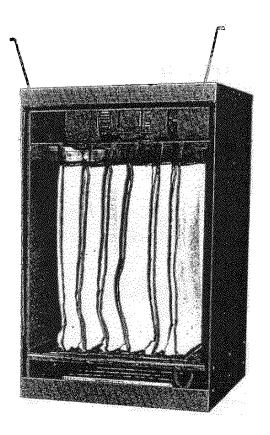
# OilPak Oil Mist Collector

APC-3-223-B



# Installation, Operation and Maintenance Instructions

Equipment Serial Number	<u> </u>	
AATEC 4 INT I		



PO Box 35690 Louisville, KY 40232-5690 www.aafintl.com 800 477 1212



## OILPAK OIL MIST COLLECTOR APC-3-223 B

# INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

### **INDEX**

- i. FORWARD
- 1.0 DESCRIPTION
- 2.0 INSTALLATION
- 2.1 Hangers
- 2.2 Oil Drains
- 2.3 Electrical Connections
- 2.4 Installation Check List
- 3.0 OPERATION
- 4.0 MAINTENANCE
- 4.1 Filter Cartridge
  - 4.1.a Cartridge Removal
  - 4.1.b Cartridge Installation
- 4.2 Pre-filter
- 4.3 Fan and Motor Assembly
- 5.0 PARTS LIST

APC-3-223-B OIL MIST COLLECTOR

#### i. FORWARD

Read this manual before installing or operating the equipment. This manual should remain with the equipment for reference regarding operation, maintenance and repair/parts. Write down the information from the nameplate on the OilPak and copy it to the front of this IOM for future reference. Retain all drawings and documents that came with the OilPak (in the "Instructions Envelope") and keep with the IOM in a readily accessible location. If you are an installer and not the owner of this equipment, all of these documents should be submitted to the end user, upon completion of the installation.

#### 1.0 DESCRIPTION

The OilPak is a compact, self-contained oil mist collector designed for ease of operation and service. The cleaning efficiency permits recirculation of the air, from most applications, back into the work area. This feature reduces heating and air conditioning operating cost and eliminates the need for expensive exhaust ducts.

The OilPak has been designed to perform its function automatically and requires very little maintenance. Like any other mechanical equipment, however, it should have regular attention and be operated according to instructions to ensure long life and trouble-free service.

#### 2.0 INSTALLATION -

The following instructions should be read carefully before installing the OilPak.

#### 2.1 HANGERS

Hangers are provided on each side of the collector for lifting or for suspending the unit from above. The OilPak may be mounted on, over or nearby the machine it is exhausting. When remotely located, a hood and duct to capture and convey the oil mist is required. Duct velocity should be about 2000 fpm to insure that all of the oil mist will be conveyed from the generating source to the OilPak.

#### 2.2 OIL DRAINS

The collected oil drains from the filter cartridge down into the inlet plenum or the machine, depending on the arrangement. The plenum is provided with a one-inch coupling to which a drainpipe must be attached, allowing the oil to return to the machine's oil sump for reuse. The drainpipe must have a four-inch trap to insure proper drainage.

#### 2.3 ELECTRICAL CONNECTIONS

The only electrical connection is wiring of the fan motor. When making the electrical connection, refer to the motor nameplate and check to insure that the proper voltage and wiring connections are applied.

#### 2.4 INSTALLATION CHECK LIST

Step	Check	
1.		Collector properly mounted and secured.
2.		Hood and ductwork installed (if required).
3.		Electrical supply connected properly.
4.		Fan wheel(s) rotating in proper direction and securely locked on motor shaft(s)
5.		Oil return drain line installed (if required)
6.		Filter cartridge latched in place and suspended by support rods.
7.		Pre-filter latched in place below cartridge.
8.		Door replaced and latched.

APC-3-223-B OIL MIST COLLECTOR

#### 3.0 OPERATION

The OilPak requires no special operating care and will continue to perform with only minimum maintenance. Caution: The OilPak is normally designed for intermittent operation, and should be allowed to drain for at least eight hours during each twenty-four hour period. The actual drain time will depend on the individual application. Consult your local AAF Sales Representative for specific recommendations. For continuous operation the airflow should be derated by 50%.

#### 4.0 MAINTENANCE

Filter cartridge, pre-filter, fan(s) and motor are readily accessible through the collector's access door. Turn the OilPak off and lock out the power supply before attempting to service.

#### 4.1 FILTER CARTRIDGE

The filter is locked into the housing with spring steel latches and held upright with support rods. The rods prevent the filter from collapsing during shutdown and aids in proper drainage. The unit should be permitted to drain eight hours out of each twenty-four.

Replacement of the filter cartridge will depend upon the type of application on which the collector is applied. It should be replaced when the static pressure in the clean air plenum (between the cartridge and top plate) exceeds 3.5" w.g., or when control of the mist is lost at the hood. Only one pressure reading is required and the 3.5" value applies regardless of external resistance.

#### 4.1.a CARTRIDGE REMOVAL

Before opening the collector, always turn off the motor. Remove the access door by raising the hinged spring steel latch arm at the top of the unit and lifting the door out of the channel in which it rests. Release the cartridge two hold down latches and remove the support rods from the hanger clips. Slide the rods out of the support loops at the top of each filter pocket. Remove the cartridge by grasping the metal header and lifting up. Discard the used filter in an appropriate manner.

#### 4.1.b CARTRIDGE INSTALLATION

Set the new filter cartridge in place in the recessed gasketed area at the bottom of the filter compartment. Slip the support rods through the loops in the cartridge pockets and return the rods to the hanger clips. Seal the cartridge inside the unit by pulling down the latches and locking them together. Replace the access door and secure it with the hinged latch arm when finished.

#### 4.2 PRE-FILTER

The pre-filter is a permanent metal retainer frame with throwaway fiberglass pad and is serviced through the access door. The pre-filter is located under the filter cartridge section and may be slid in or out freely for replacement or inspection, after the hold down latches are released.

Pre-filter replacement depends upon the type of application. By proper maintenance of the pre-filter, the final filter cartridge life will be extended, thereby reducing operating cost.

Release the two hold down latches and pull the pre-filter retainer frame out. Open the frame, discard the old pad and insert a new one. The new media should be installed in the OilPak with the blue tinted side up. Close the frame, return it to the collector and rotate the hold down latches into a locking position. Replace the access door and start the unit.

APC-3-223-B OIL MIST COLLECTOR

#### 4.3 FAN AND MOTOR ASSEMBLY

Before initial start-up and during routine inspection, wheels should be checked to insure they are secure on the motor shaft. Fan(s) should be "bumped" at initial start-up and any time electrical work is done on the OilPak, to insure proper rotation.

The fan(s) and motor are mounted to the under side of the top plate. By removing the four (4) hold down bolts, the entire assembly may be lifted off the housing. Seldom is this necessary, however, since the fan(s) and motor are easily reached by removing the quick opening inspection door. The standard motor is totally enclosed, fan cooled and requires only the manufacturer's suggested maintenance. The fan wheel may be removed for replacement, inspection or repair.

#### 5.0 PARTS LIST

Item	Collector Size	AAF Part Number	Quantity per Collector
Filter Cartridges			
12" x 24" x 18"	50	80-830034-3	1
24" x 24" x 18"	100	80-830034-2	1
24" x 24" x 36"	200	80-830034-1	1
Pre-Filter			
13" x 20"	50	116-905992-1	1
20" x 25"	100/200	116-905992-2	1
Pre-Filter Retainer			
	50	59-52506-1 <b>4</b>	1
	100/200	59-52506-2	1
Fan Wheel			
Right Hand* (CCW)	50	2242816	1
Right Hand* (CCW)	100	2242816	1
Left Hand* (CW)	100	2242824	1 1
Right Hand* (CCW)	200	2242758	1 1
Left Hand* (CW)	200	2242766	1
Door Gasket			
Top/Bottom		905448-1	2
Bottom Ends	50/100	905448-5	2 2
Sides		805448-2	2
Intermediate (hollow)		905372-1	1
Top/Bottom		905448-3	2
Bottom Ends	200	905448-5	2 2 2
Sides	200	905448-4	2
Intermediate (hollow)		905372-2	1
Filter Gasket			
	50	116-905463-1	1
	100/200	116-905463-2	i
Oil Drain Tube			· · · · · · · · · · · · · · · · · · ·
	50/100/200	116-905299-1	1

<sup>\*</sup> Right hand or left hand wheel determined by facing front of OilPak.