



# INSTALLATION INSTRUCTIONS EHP SERIES FILTER ELEMENTS

## PRODUCT PURPOSE & FUNCTION:

Van Air's EHP series elements provide long service life as well as ease of maintenance. Both particulate and coalescing elements will operate efficiently for extended periods of time until a pressure drop of 10 PSID has occurred. The activated carbon element (RD grade) must be changed to suit specific applications, or at least every 6 months.

**EHP-6, EHP-15/20 & EHP-50**

### FLOW DIRECTION THROUGH ELEMENT

**(COALESCING)  
IN/OUT**

**(PARTICULATE)  
OUT/IN**

**EHP-35, EHP-70/75, EHP-100/110 & EHP-175/195**

**EHP-275 & EHP-550**

FILTRATION GRADES					
APPLICATION	ELEMENT GRADE	PURPOSE	NOMINAL PARTICULATE REMOVAL	MAXIMUM INLET TEMP. (°F)	ELEMENT FLOW DIRECTION
Oil Removal (Liquids)	AA	Extra Coarse Coalescing	25.00µ	225	IN/OUT
	A	Coarse Coalescing	5.00µ	225	IN/OUT
	B	General Purpose Coalescing	1.00µ	175	IN/OUT
	C	High Efficiency Coalescing	0.01µ	125	IN/OUT
Solid Particulate Removal	RAA	Extra Coarse Particulate	25.00µ	225	OUT/IN
	RA	Coarse Particulate	5.00µ	225	OUT/IN
	RB	General Purpose Particulate	1.00µ	225	OUT/IN
	RC	High Efficiency Particulate	0.01µ	225	OUT/IN
Oil Vapor Removal	RD	Vapor Adsorbing	0.01µ	80	OUT/IN

## WARNINGS

- DO NOT REPLACE ANY ITEM ON VESSEL WHILE IT IS UNDER PRESSURE.
- DO NOT OPERATE LEAKING FILTER TAKE THEM OUT OF SERVICE IMMEDIATELY.
- DO NOT OPERATE FILTER ABOVE MAXIMUM WORKING PRESSURE AND/OR MAXIMUM OPERATING TEMP.
- USE THE PROPER SAFETY PRECAUTIONS FOR THE GAS BEING PROCESSED.

## ELEMENT REPLACEMENT

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### IMPORTANT

**TO REDUCE ENERGY CONSUMPTION FROM EXCESSIVE PRESSURE DROP AND MINIMIZE CHANCE OF CONTAMINANT CARRYOVER, INSTALL NEW ELEMENT WHEN PRESSURE DROP REACHES 10 PSID (EXCEPT GRADE RD). INSTALL NEW RD ELEMENTS WHEN HYDROCARBON VAPORS ARE FIRST DETECTED DOWNSTREAM OR AT LEAST EVERY 6 MONTHS.**

1. Close inlet and outlet shutoff valves (and open bypass valve if provided), or lock out all compressed air supply to filter housing.
2. Depressurize filter by loosening the drain plug, but do not remove the drain plug. Leave drain cracked open until all pressure is out of filter housing and bowl is removed.
3. Follow the filter instruction manual included with filter housing to disassemble the filter.
4. Remove used element and discard.
5. Remove new element from packaging. Check to make sure that o-ring is properly positioned in endcap and has been lightly greased.
6. Grasp clean element by bottom endcap and install it in the filter head.
7. Check o-ring in filter head. Replace if worn or damaged.
8. Clean and lubricate threads on bowl with light grease. This will facilitate removal of bowl at next servicing.
9. Follow filter instruction manual to reassemble the filter.
10. Tighten the drain plug then slowly open inlet and outlet shutoff valves. Close bypass valve (if provided). Filter is now in service.
11. Monitor differential pressure regularly and replace element as indicated.

### WARNING

**DO NOT UNSCREW FILTER BOWL FROM HEAD UNTIL VESSEL IS COMPLETELY DEPRESSURIZED.**

## MAINTENANCE

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- Drain coalescing filters every shift.
- Check differential pressures weekly on coalescing and particulate filters (AA, A, B, C, RA, RB, RC, and HT grades). When differential pressure reaches 10 psid, install clean elements. On adsorbing filters (grade RD), install clean elements when hydrocarbon vapors are first detected downstream or every six months, whichever comes first.
- For correct replacement element model numbers see: label on filter housing, bottom element endcap and/or page 3.
- When changing out element, inspect housing o-ring for nicks and/or cracks. If any nicks and/or cracks are present, replace o-ring.

## REPLACEMENT ELEMENT

FILTER MODEL	ELEMENT MODEL	PART NUMBER
FHP-6-50.0	EHP-6-AA	26-11000
	EHP-6-RAA	26-11004
	EHP-6-A	26-11001
	EHP-6-RA	26-11005
	EHP-6-B	26-11002
	EHP-6-RB	26-11006
	EHP-6-C	26-11003
	EHP-6-RC	26-11007
	EHP-6-RD	26-11008
FHP-20-14.5 & FHP-15-50.0	EHP-15/20-AA	26-11010
	EHP-15/20-RAA	26-11014
	EHP-15/20-A	26-11011
	EHP-15/20-RA	26-11015
	EHP-15/20-B	26-11012
	EHP-15/20-RB	26-11016
	EHP-15/20-C	26-11013
	EHP-15/20-RC	26-11017
	EHP-15/20-RD	26-11018
FHP-35-50.0	EHP-35-AA	26-11020
	EHP-35-RAA	26-11024
	EHP-35-A	26-11021
	EHP-35-RA	26-11025
	EHP-35-B	26-11022
	EHP-35-RB	26-11026
	EHP-35-C	26-11023
	EHP-35-RC	26-11027
	EHP-35-RD	26-11028
FHP-50-14.5	EHP-50-AA	26-11030
	EHP-50-RAA	26-11034
	EHP-50-A	26-11031
	EHP-50-RA	26-11035
	EHP-50-B	26-11032
	EHP-50-RB	26-11036
	EHP-50-C	26-11033
	EHP-50-RC	26-11037
	EHP-50-RD	26-11038

FILTER MODEL	ELEMENT MODEL	PART NUMBER
FHP-75-14.5 & FHP-70-50.0	EHP-70/75-AA	26-11040
	EHP-70/75-RAA	26-11044
	EHP-70/75-A	26-11041
	EHP-70/75-RA	26-11045
	EHP-70/75-B	26-11042
	EHP-70/75-RB	26-11046
	EHP-70/75-C	26-11043
	EHP-70/75-RC	26-11047
	EHP-70/75-RD	26-11048
FHP-110-14.5 & FHP-100-50.0	EHP-100/110-AA	26-11050
	EHP-100/110-RAA	26-11054
	EHP-100/110-A	26-11051
	EHP-100/110-RA	26-11055
	EHP-100/110-B	26-11052
	EHP-100/110-RB	26-11056
	EHP-100/110-C	26-11053
	EHP-100/110-RC	26-11057
	EHP-100/110-RD	26-11058
FHP-19514.5 & FHP-175-50.0	EHP-175/195-AA	26-11060
	EHP-175/195-RAA	26-11064
	EHP-175/195-A	26-11061
	EHP-175/195-RA	26-11065
	EHP-175/195-B	26-11062
	EHP-175/195-RB	26-11066
	EHP-175/195-C	26-11063
	EHP-175/195-C/RC	26-11067
	EHP-175/195-RD	26-11068
FHP-275-14.5	EHP-275-AA	26-11070
	EHP-275-RAA	26-11074
	EHP-275-A	26-11071
	EHP-275-RA	26-11075
	EHP-275-B	26-11072
	EHP-275-RB	26-11076
	EHP-275-C	26-11073
	EHP-275-RC	26-11077
	EHP-275-RD	26-11078

FILTER MODEL	ELEMENT MODEL	PART NUMBER
FHP-550-14.5	EHP-550-AA	26-11080
	EHP-550-RAA	26-11084
	EHP-550-A	26-11081
	EHP-550-RA	26-11085
	EHP-550-B	26-11082
	EHP-550-RB	26-11086
	EHP-550-C	26-11083
	EHP-550-RC	26-11087
EHP-550-RD	26-11088	

## WARRANTY

### I. INSTALLATION.

Unless otherwise set forth in a quotation and/or acknowledgment, Seller shall not be responsible for installation. Cost of and all risks of damage to the equipment and/or components thereof caused by installation shall be the sole responsibility of Buyer. If supervision of installation and/or supervision of start up of the equipment is to be provided by Seller, Buyer shall assume all costs incurred by Seller in furnishing supervision. If supervision of installation and/or supervision of start up of the equipment is provided by Seller, Seller shall only be responsible for any loss or damage growing out of a direct negligent act or acts of Seller's supervisor.

SELLER SHALL NOT BE RESPONSIBLE FOR IMPROPER OPERATION OF THE EQUIPMENT DUE TO FAULTY ERECTION OR INSTALLATION.

### II. PERFORMANCE.

Seller shall have no responsibility for the performance of its Goods when installed under conditions varying materially from those under which the product is usually tested or operated under existing industry standards.

### III. WARRANTY

All filter housings are guaranteed to be free of defective materials and workmanship for a period of **five (5) years** from the date of shipment when used in compressed air application. This warranty does not include elements, drain line components, gaskets, o-rings or any other types of seals, or any accessories or expendable items.

All goods manufactured by seller are guaranteed to be free from defective materials and workmanship for a period of one (1) year from the date of shipment. The equipment and accessories sold but not manufactured by Seller are guaranteed only to the extent that either Seller or Buyer is able to recover under the manufacturer's warranty. This warranty shall not be assignable to buyer.

The above warranties for all products described do not cover abuse, neglect, lack of normal maintenance, accidents or other exceptional circumstances.

Date of shipment will be defined as the date of departure from the factory or from distributor stock. A copy of the distributor invoice to the customer at time of shipment is required as verification of shipment from distributor stock. Equipment start up will be verified by receipt of the warranty registration card.

Seller's obligation under this warranty may, at its option, be discharged by furnishing or repairing, without charge, FOB its factory, a similar part to replace any part of its own manufacture which within the above specified periods, proves to have been defective, provided that within a reasonable time for inspection after delivery, Seller is notified of such defects and the equipment, material or part claimed to be defective is delivered pre-paid to Seller at Lake City, Pennsylvania with evidence that it has been properly maintained and used in accordance with instructions. If, in connection with such warranties, repairs are performed by the Buyer with the written authorization of Seller, then the expense in connection with such repairs shall not exceed the cost of material and direct labor. If such repairs are performed by Buyer without the written authorization of Seller, Seller will not assume any of the expenses in connection with such repairs and will immediately void any remaining warranty on the Goods.

THE REPAIR OR REPLACEMENT WARRANTY HEREIN SET FORTH IS THE EXCLUSIVE WARRANTY GIVEN BY SELLER FOR ITS GOODS. THIS WARRANTY IS GIVEN IN LIEU OF ANY OR ALL WARRANTIES, WHETHER WRITTEN OR ORAL, EXPRESSED OR IMPLIED. ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE HEREBY EXPRESSLY EXCLUDED BY SELLER. SELLER NEITHER ASSUMES, NOR DOES IT AUTHORIZE ANY OTHER PERSON TO ASSUME ON ITS BEHALF ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS GOODS.

### IV. LIMITATIONS OF LIABILITIES AND INDEMNITIES.

IN NO CASE, WHETHER AS A RESULT OF BREACH OF CONTRACT, BREACH OF WARRANTY OR TORT (INCLUDING SELLER'S OR BUYER'S NEGLIGENCE OR STRICT LIABILITY) SHALL SELLER BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES INCURRED BY BUYER, INCLUDING, BUT NOT LIMITED TO, LOSS OF SALES PROFIT, REVENUE, OR GOOD WILL; LOSS OF USE OF GOODS OR ANY ASSOCIATED EQUIPMENT OR MATERIAL; COST OF CAPITAL; COST OF SUBSTITUTE PRODUCTS, FACILITIES OR SERVICES; DOWN TIME COSTS; ATTORNEY'S FEES; OR LOSSES OR CLAIMS OF CUSTOMERS OF BUYER FOR SUCH DAMAGES BUYER HEREBY AGREES TO INDEMNIFY AND HOLD HARMLESS SELLER FROM ANY AND ALL SUCH DAMAGES BUYER FURTHER AGREES TO DEFEND INDEMNIFY AND HOLD HARMLESS SELLER FROM ANY AND ALL CLAIMS, LIABILITY, DAMAGES OR EXPENSES (INCLUDING ATTORNEY'S FEES) DUE TO PERSONAL INJURIES OR DEATH, TO BUYER, ITS EMPLOYEES, AND THIRD PARTIES AND FROM PROPERTY DAMAGE RESULTING FROM THE NEGLIGENCE OR STRICT LIABILITY OF BUYER NOT WITHSTANDING THE PROVISIONS OF ANY WORKER COMPENSATION OR SIMILAR STATUTE

### V. SERVICE, OPERATING PROCEDURE, WARNINGS.

Should Buyer request start up supervision by Seller, a maximum number of days required for this supervision may be included and specified in the quotation and/or acknowledgment as a separate price item. The specified days are only approximate, since start up supervision is contingent upon equipment and work supplied by others and beyond the control of Seller, and Seller shall be paid for any days actually worked in addition to those specified on a pro-rata basis.

Start up supervision and warranty supervision and warranty service time will include all elapsed time during the standard working hours, as defined by Seller, or Seller's representative from the time Seller's representative leaves his operating base or another customer's plant.

Where the service to be performed is start up supervision, Seller should be notified approximately 30 days prior to start up. Seller's representatives may be required to have standard time verification sheets approved by Buyer's authorized representative, and the name and title of this representative should be furnished to Seller with the notification.

Unless set forth in the quotation and/or acknowledgment, Seller shall not be obligated to provide special operating manuals or operating procedures for the operation of its equipment or supply special warning placards to be affixed to the equipment. If such manuals, procedures or placards are provided by Seller, Buyer shall be responsible for payment of cost of furnishing such items, for instructing any operator of the equipment as to the contents of such manuals and/or procedures; for requiring that such procedures be abided by; for insuring that warning placards remain affixed to the equipment and for requiring operators to abide by warning placards.

Any safety equipment required to be worn by any operator or maintenance person shall be provided by Buyer, and the failure to provide such equipment or the failure to require the use thereof shall be the Buyer's sole responsibility. Buyer shall indemnify and hold Seller harmless for any liability with respect thereto.

Seller shall not be responsible for providing safety devices and/or guarding of the equipment except as provided for in the quotation and/or acknowledgment, and Buyer specifically assumes all responsibility for supplying such safety devices and/or guarding necessary for the safe operation of the equipment. If safety devices and/or guarding are specified in the quotation and/or acknowledgment, Buyer shall be solely responsible for making certain that any operator of the equipment uses such safety devices and/or guarding and Buyer shall indemnify and hold Seller harmless with respect to any property damage and/or personal injury, including death, occasioned by any person by reason of such failure on the part of Buyer and/or its operator.

**VAN AIR SYSTEMS INC**  
MAKING COMPRESSED AIR AND GAS WORK BETTER SINCE 1944.

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