

Installation Manual for VMAC OEM
Remote Air Intake Packages
2" Series A2201\*\*
2.5" Series A2202\*\*

www.vmacair.com

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Document #: 1901083 Changes and Revisions

				Check			
Revision	Revision Revision Details		Eng.		Tech.	Ound	Implemented
			Mech.	Elec.	recn.	Qual.	
Α	ECN-19-213: Engineering Release	NDB	PID	N/A	DSB	AM.	10 DEC 2020
В	ECN-22-085: Added air filter replacement section and IPLs for replacement cartridges and 2.5" end caps.	NDB	SJH	N/A	DSB	LPH	22JUN2022

### **Important Information**

The information in this manual is intended for approved VMAC installers who have been trained in installation and service procedures and/or for anyone with mechanical trade certification who have the tools and equipment to properly and safely perform the service. Do not attempt this service without the appropriate mechanical training, knowledge, and experience.

Follow all safety precautions for mechanical work. Any fabrication for correct fit in equipment must follow industry standard "best practices".

#### **Notice**

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**Printed in Canada** 

## **General Information**

#### Introduction

This manual provides installation instructions for the generic Remote Air Intake Package. Read this manual prior to servicing or operating the compressor system.

Follow all safety precautions when servicing or operating the VMAC system.

Proper service and repair are important to the safety of the operator and the safe, reliable operation of the equipment. Always use genuine VMAC replacement parts.

The procedures described in this manual are the only approved methods of service and operation.

## **Ordering Parts**

To order parts, contact the VMAC Inside Sales department. To assist in selecting the appropriate parts, please provide the relevant VMAC serial number or part number, description, and quantity. Contact VMAC Inside Sales by calling 1 (887) 912-6605 or by email to sales@vmacair.com.

## Safety

### **Important Safety Notice**

The information contained in this manual is based on sound engineering principles, research, extensive field experience and technical information. Information is constantly changing with the addition of new models, assemblies, service techniques and running OEM changes. If a discrepancy is found in this manual, contact the VMAC OEM department prior to initiating or proceeding with installation, service or repair. Current information may clarify the issue. Anyone with knowledge of such discrepancies, who proceeds to perform service and repair, assumes all risks.

Only proven service procedures are recommended. Anyone who departs from the specific instructions provided in this manual must first assure that their safety and that of others is not being compromised, and that there will be no adverse effects on the operational safety or performance of the equipment.

VMAC will not be held responsible for any liability, consequential damages, injuries, loss or damage to individuals or to equipment as a result of the failure of anyone to properly adhere to the procedures set out in this manual or standard safety practices. Safety should be the first consideration when performing any service operations. If there are any questions concerning the procedures in this manual, or more information is required, please contact VMAC OEM department prior to beginning repairs.

## **Safety Messages**

This manual contains various warnings, cautions and notices that must be observed to reduce the risk of personal injury during installation, service or repair and the possibility that improper installation, service or repair may damage the equipment or render it unsafe.



This symbol is used to call attention to instructions concerning personal safety. Watch for this symbol; it points out important safety precautions, it means, "Attention, become alert! Your personal safety is involved". Read the message that follows and be aware of the possibility of personal injury or death. As it is impossible to warn of every conceivable hazard, common sense and industry standard safety practices must be observed.



This symbol is used to call attention to instructions on a specific procedure that if not followed may damage or reduce the useful life of the compressor or other equipment.



This symbol is used to call attention to additional instructions or special emphasis on a specific procedure.

## **Safety Precautions**



As it is impossible to warn of every possible hazard that may result from operating this system, common sense and industry standard safety practices must be observed.

Read this information before operating the compressor for the first time. Follow the information and procedures in this manual for operation, maintenance and repair. Observe the following items to reduce the chance of personal injury or equipment damage.

Proper service and repair are important to the safety of the service technician and the safe, reliable operation of the equipment. Always use genuine VMAC replacement parts.

The procedures described in this service manual are effective methods of service and repair. Some procedures may require the use of tools specially designed for a specific purpose. Anyone using a replacement part, service procedure or tool must first determine that neither their safety nor the safe operation of the equipment will be compromised by the replacement part, service procedure or tool selected.

#### **Moving Parts Hazard**



- Before performing service, disconnect the power source to prevent unexpected equipment start.
- Do not operate the system without guards in place. If the guards are damaged or missing, replace them before operating the equipment.

#### **Burn Hazard**



- The compressor system gets very hot during operation, contact with the components or the oil can cause serious injury. Allow sufficient time for the system to cool prior to performing service.
- Never allow any part of your body to contact the compressor components until the system has cooled sufficiently.

#### **Compressor Air and Oil Hazard**

- The compressor system is under sufficient pressure that a leak could force the air/oil mixture through the skin directly into your bloodstream. This could cause serious injury or death.
- Ensure the system is completely depressurized before attempting maintenance or repair.
- Do not use compressed air to clean off clothing or skin, compressed air can penetrate the skin causing serious injury or death.
- Do not move or service the system while it is pressurized or operating.
- Components and hoses under pressure could separate suddenly and cause serious injury or death. If equipped, the air receiver tank must be drained prior to servicing the system.
- Never adjust or attempt to make any repairs to the system while the engine is running. Components and hoses under pressure could fail and cause serious injury or death.



#### **Burst Hazard**

- Do not repair components, only replace with approved parts.
- Do not tamper with or disable factory safety equipment.



#### **Personal Safety**

 Vaporized oil is a respiratory hazard, do not breathe the compressor air



 Always use the appropriate personal protective equipment, particularly eye and hearing protection when operating air powered equipment.



# **Remote Air Intake Package Part Numbers**

Remote air intake packages are selected based on hose size and length as determined by the compressor being used and the location of the air filter within the system layout. See the descriptions and table below to generate the appropriate part number as required.

Hose Length: Hose length is determined by the location of the air filter and distance to the compressor. Available lengths vary from 2ft to 15 ft in 1ft increments. Lengths in excess of 15' are available upon request. The hose can be cut shorter during install if needed.

Hose ID: Hose size is determined by the compressor size and flow rate. 2" ID A2201\*\* series kits are appropriate for up to 70 CFM; flows over 70CFM should use 2.5" A2202\*\* series kits.

A2201** and A2202** Part Numbers and Details								
Part Number	Ho: Leng		Hose ID		Part Number	Ho: Leng		Hose ID
A220102	2	ft	2"		A220202	2	ft	2.5"
A220103	3	ft	2"		A220203	3	ft	2.5"
A220104	4	ft	2"		A220204	4	ft	2.5"
A220105	5	ft	2"		A220205	5	ft	2.5"
A220106	6	ft	2"		A220206	6	ft	2.5"
A220107	7	ft	2"		A220207	7	ft	2.5"
A220108	8	ft	2"		A220208	8	ft	2.5"
A220109	9	ft	2"		A220209	9	ft	2.5"
A220110	10	ft	2"		A220210	10	ft	2.5"
A220111	11	ft	2"		A220211	11	ft	2.5"
A220112	12	ft	2"		A220212	12	ft	2.5"
A220113	13	ft	2"		A220213	13	ft	2.5"
A220114	14	ft	2"		A220214	14	ft	2.5"
A220115	15	ft	2"		A220215	15	ft	2.5"

## **Air Filter Installation**

The air filter can be mounted in a horizontal or vertical fashion with the ejector pointing down. If the inlet faces upwards it is recommended that rain hat 3600113 be installed to protect the intake filter against water and other debris. For use in dusty environments, cyclone rain hat 3600114 <a href="must">must</a> be installed as a prefilter to protect against water and fine particulates.

It is recommended that the filter be installed in a location that provides cool, fresh air to maximize compressor efficiency and output.

Mount the air filter using two 5/16" or M8 bolts and nuts through the bracket included with the air filter. The bolts and nuts are not included in this package. Loosen mounting band to rotate filter relative to the mount surface.

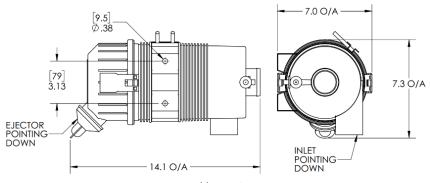


Figure 1 - A2201\*\* Air Filter Dimensions

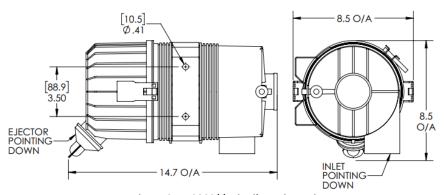


Figure 2 - A2202\*\* Air Filter Dimensions

## **Connecting the Air Intake Hoses**



When routing hoses, ensure cap plugs are installed so that contaminants do not get in the line. Take care when routing hoses, as a hose failure may damage the compressor and/or cause injury.



All hoses, tubes and wires that are installed, rerouted or shifted during the installation must be secured so that they do not contact any hot, sharp or moving parts. Use rubber coated P-clips and appropriate hose protection wherever possible.

## **Installing hoses**

Route the hose from the incoming air filter to the compressor.
Loosen the worm drive clamps and slip them over top of the hose on either
end.
Slip the hose onto the filter. Position the worm drive clamp, tighten it, and
ensure the connection is secure.
Slip the hose onto the compressor intake. Position the worm drive clamp,
tighten it, and ensure the connection is secure.
90 degree M-F elbows are not included but available if needed for either the
filter or compressor end of the hose. 2" elbow is part number 1700661, 2.5" $$
elbow part number is 1700662. See Figure 3 for illustration

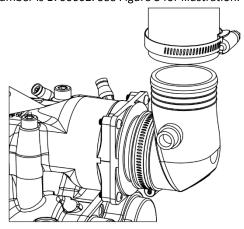


Figure 3 - Optional Elbow Installation (Part # 1700661/662)

## **Air Filter Replacement**

### **Filter Replacement**

- Remove the air filter cap by disengaging the latches on the air filter housing.

  Remove the primary filter element from the housing. Be cautious with removing the filter as to not disturb the safety filter (should one be installed). If a safety filter is not present and the main filter is not being replaced immediately, cover the opening with a damp cloth to prevent dust or other contaminants from entering the clean side of the filter until the main filter can be replaced.
- Place the new filter in the housing and secure the air filter cap back on the housing using the latches. Ensure that the ejector valve is point downwards and is free of debris.

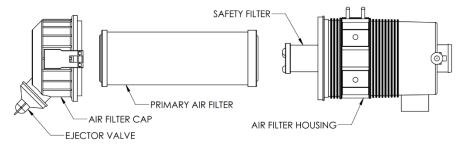


Figure 4 - Air Filter Assembly Component Overview

### **Safety Filter**

The air filter housing allows for an additional "Safety" filter. The main filter element fits over top of the safety filter and ensures that any dirt particles dislodged during a filter change are unable to move to the clean side of the air filter (Figure 4).

These filters are not supplied by VMAC but are fully compatible with our systems and will have no noticeable effect on CFM. Figure 5 below shows an example of the safety filter.



Figure 5 - Safety Filter

# **Air Filter Minder Installation (Optional)**

An optional air filter minder (part number 2100105 or 3501129) may be installed to monitor the filter's dust load level and determine when the air intake filter requires replacement. Filters that appear dirty may still have plenty of useable life left in them and the best way to tell if a filter requires replacement is to measure the air restriction. The air filter minder can be installed in either of the two ports indicated below and can be extended or remoted as required. If the minder is being directly mounted onto the air filter, remove the 1/8" NPT pipe nipple on the minder. Remove the cap protecting the accessory port on the filter, apply sealant and thread on the filter minder.

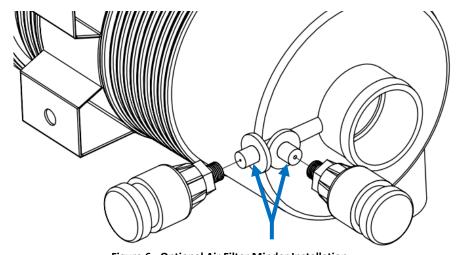


Figure 6 - Optional Air Filter Minder Installation

## **Illustrated Parts List**

### A2201## For Systems up to 70CFM

Item#	Part#	Qty	Description
1	9500030	1	ASSEMBLY, AIR FILTER
2	1700650	2'-15'	HOSE, FLEXIBLE, AIR INTAKE 2"
3	2200027	2	CLAMP, HOSE HS32
4	4400979	1	LABEL, AIR CLEANER, HEAVY DUTY
5	1901083	1	INSTR/IPL, REMOTE AIR INTAKE PKGS

## - Last two digits in assembly number denotes 1700650 hose length in feet.

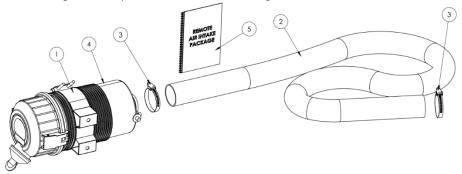


Figure 7 - A2201## Remote Air Intake Package (A220212 shown)

#### A2202## For Systems up to 130CFM

Item#	Part #	Qty	Description
1	2160103	1	AIR FILTER, 150CFM, 2.5IN
2	1700550	2'-15'	HOSE, FLEXIBLE, AIR INTAKE 2.5"
3	2200158	2	CLAMP, HOSE HS40
4	4400979	1	LABEL, AIR CLEANER, HEAVY DUTY
5	1901083	1	INSTR/IPL, REMOTE AIR INTAKE PKGS

## - Last two digits in assembly number denotes 1700550 hose length in feet.

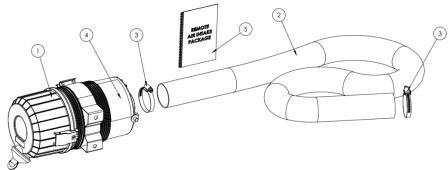


Figure 8 - A2202## Remote Air Intake Package With Optional Elbow (A220212 shown)

#### **REPLACEMENT CARTRIDGES**

Item#	Part#	Qty	Description
1	9500061	1	ELEMENT, AIR FILTER, 2"
2	3600200	1	ELEMENT. AIR FILTER. 2.5"

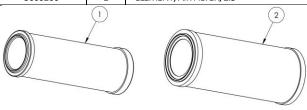


Figure 9 - Remote Air Intake Replacement Cartridges

#### **OPTIONAL ACCESSORIES**

Item#	Part#	Qty	Description
1	1700661	1	HOSE, ELBOW 2.0 ID X 2.0 OD
2	1700662	1	HOSE, ELBOW 2.5 ID X 2.5 OD
3	2100105	1	MINDER, FILTER, 20IN H2O
4	3501129	1	FILTER, SWITCH, 20IN H2O

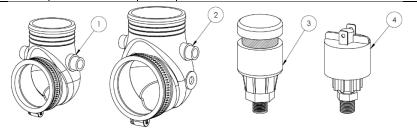


Figure 10 - Remote Air Intake Optional Accessories

#### **OPTIONAL ACCESSORIES - END CAPS**

Item#	Part#	Qty	Description
5	3600113	1	RAIN HAT, AIR CLEANER STD
6	3600114	1	RAIN HAT, AIR CLEANER CYCLONE
7	3600156	1	RAIN HAT, AIR CLEANER STD 2.5"
8	3600211	1	ASSY, RAIN HAT, CYCLONE, 2.5"

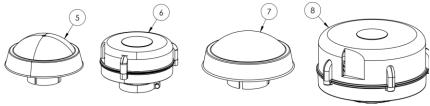


Figure 11 - Remote Air Intake Optional Accessories - End Caps

VMAC Technical Support: 888-241-2289 VMAC Knowledge Base: https://kb.vmacair.com

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