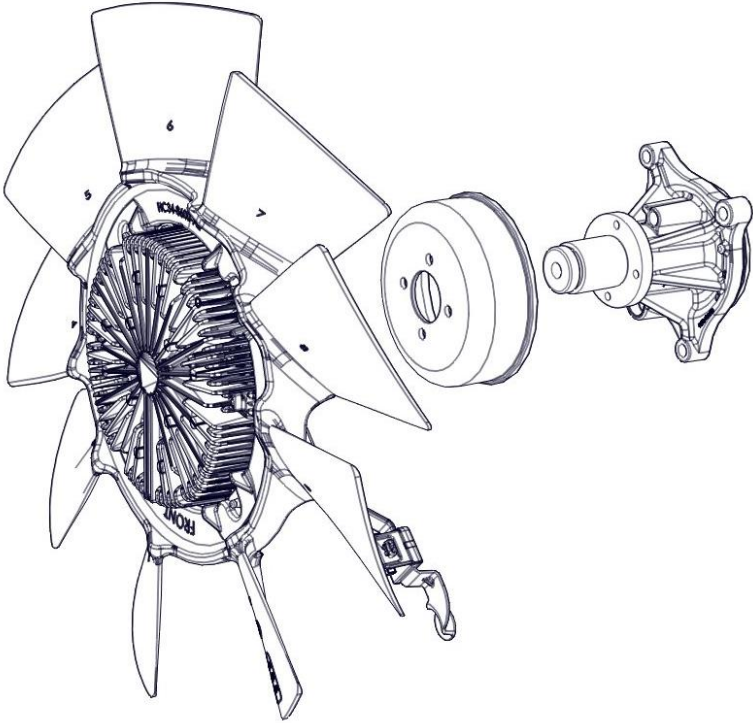


VMAC[®]
VEHICLE MOUNTED AIR COMPRESSORS
COMPACT. POWERFUL.



**Installation Manual for
VMAC Accessory
A700253
Ford 6.2 L V8 Water Pump Retrofit**

Installation Manual for VMAC Accessory A700253 Ford 6.2 L V8 Water Pump Retrofit

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Revision	Revision Details	Revised by	Checked by				Implemented
			Eng.		Tech.	Qual.	
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A	Initial Release	MSP	CJH	N/A	GB	AMG	27 July 2017
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C	18-210 Change to wording re returns	MSP	CAM	N/A	RDB	AWM	19 Sept 2018

Additional Application Information

- Retrofit instructions for VMAC systems: V900122, V910022, V900112, V910012

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Ford® is registered trademark of Ford Motor Company.

Important Information

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

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

Notice

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VMAC – Vehicle Mounted Air Compressors
 VMAC Technical Support: 1-888-241-2289
 VMAC Knowledge Base: www.kb.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 VMAC prior to initiating or proceeding with installation, service or repair. Current information may clarify the issue. Any person 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 any person 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 before 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.

Warranty

VMAC Standard Warranty (Limited)

For complete warranty information, including both VMAC Standard Warranty (Limited) and VMAC Lifetime Warranty (Limited) requirements, please refer to our current published warranty located at:



www.vmacair.com/warranty

If you do not have access to a computer, please contact us and we will be happy to send you our warranty.

VMAC's warranty is subject to change without notice.

VMAC Lifetime Warranty (Limited)

A VMAC Lifetime Limited Warranty is offered on the base air compressor only and only on UNDERHOOD, Hydraulic Driven, Transmission Mounted, Gas and Diesel Engine Driven Air Compressors, Multifunction Power Systems, and other products as defined by VMAC, provided that (i) the purchaser fully



completes and submits a warranty registration form within 3 months of purchase, or 200 hours of operation, whichever occurs first; (ii) services are completed in accordance with the Owner's Manual; (iii) proof of purchase of applicable service kits are made available to VMAC upon request.

The VMAC Lifetime Warranty is applicable to new products shipped on or after 1 October, 2015.

Warranty Registration

The VMAC warranty registration form is located near the back of this manual. This warranty registration form must be completed and sent to VMAC at the time of installation for any subsequent warranty claim to be considered valid.

There are 4 ways the warranty can be registered with VMAC:

Online

www.vmacair.com/warranty

Email

warranty@vmacair.com

Fax

(250) 740-3201

Mail

VMAC - Vehicle Mounted Air Compressors
1333 Kipp Road, Nanaimo, BC, Canada V9X 1R3

General Information

Before Starting

Read this manual before attempting installation to ensure familiarity with the components and how they will be installed on the vehicle. Identify variations for different engine models and different situations that are listed in the manual. Open the package, unpack the components and identify them.

Ordering Parts

To order parts, contact a VMAC dealer. The dealer will ask for the VMAC serial number, part number, description and quantity. Locate the nearest dealer online at www.vmacair.com/dealer-locator or call 1-877-912-6605.



Torque Specifications

All fasteners must be torqued to specifications. Use manufacturers' torque values for OEM fasteners. **Apply Loctite 242 (blue) or equivalent on all engine mounted fasteners.** Torque values are with Loctite applied unless otherwise specified.

STANDARD GRADE 8 NATIONAL COARSE THREAD								
Size	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4
Foot-pounds (ft•lb)	9	18	35	55	80	110	170	280
Newton meter (N•m)	12	24	47	74	108	149	230	379

STANDARD GRADE 8 NATIONAL FINE THREAD					
Size	3/8	7/16	1/2	5/8	3/4
Foot-pounds (ft•lb)	40	60	90	180	320
Newton meter (N•m)	54	81	122	244	434

METRIC CLASS 10.9						
Size	M6	M8	M10	M12	M14	M16
Foot-pounds (ft•lb)	4.5	19	41	69	104	174
Newton meter (N•m)	6	25	55	93	141	236

Table 1 – Torque Table

Special Tools Required

- Pneumatic fan wrench removal set (such as Lisle® 43300) or a manual fan pulley holder (such as KD Tool® KD3900).

Installation



Apply Loctite 242 (blue) to all engine mounted fasteners.

- Disconnect the battery (or both batteries if equipped with dual batteries).
- Drain the coolant into a clean container and set aside for use later.
- Locate the red and white VMAC decal that advises operators and maintenance personnel that the vehicle is equipped with an aftermarket heavy duty water pump. Thoroughly clean the decal and surrounding area and affix the new decal included with the replacement water pump (Figure 1).



Figure 1 – New water pump decal

- Disconnect the upper radiator hose from the radiator.
- Remove the air duct.
- Remove the power steering reservoir from the driver side of the fan shroud. Keep the power steering lines connected. Temporarily tie the reservoir up and out of the way of the shroud.



The power steering reservoir cap will leak if the reservoir is not kept upright.

- Swing the lower shroud section forward and tape in place.
- Disconnect the fan stator plug.
- Remove the fan using a pneumatic fan wrench (such as Lisle 43300).
- Remove the fan harness bracket (13 mm nut on stud with bracket).
- Remove the entire fan shroud for easiest access.
- With the accessory belt tensioned, loosen the 4 water pump pulley bolts.
- Remove the accessory drive belt.
- Remove the 4 water pump pulley bolts and retain for reuse.
- Remove the water pump pulley and set aside for reuse.

- Remove the 4 water pump bolts and the water pump.

NOTE

The replacement water pump includes an integral fan spacer.

- Inspect and clean the sealing surfaces.
- Lubricate the new water pump O-ring with clean engine coolant and install the new pump.
- Apply Loctite 242 (blue) to the 4 water pump bolts and install the supplied heavy-duty water pump (Figure 2).



Prior to seating the water pump in the engine, ensure the bolt holes are aligned as the water pump cannot be rotated once seated in the engine cavity.

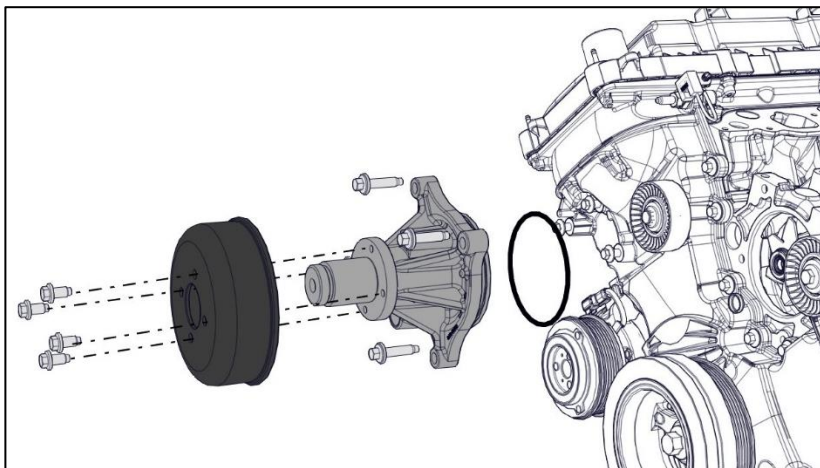


Figure 2 – Replace coolant pump

- Tighten the water pump bolts in 2 stages using a criss-cross pattern:
 1. Tighten all bolts finger tight.
 2. Torque bolts to 18 ft•lb.
- Install the water pump pulley and 4 bolts hand tight
- Install and tension the accessory drive belt.
- Torque the 4 water pump pulley bolts to 18 ft•lb.
- Install the fan and shroud as one unit.
- Install the upper radiator hose. Rotate the hose on the quick connect to minimize twists or kinks and tighten the hose clamp.
- Fill the cooling system with the coolant saved earlier.
- Reinstall the power steering fluid reservoir onto the fan shroud. Top up the fluid as necessary.
- Reconnect the battery / batteries.

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Manufactured by



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