

Installation Instructions for the A500030 - External Fuel Pump D600003/4 Diesel Driven Compressor D600007 RAPTAIR Multi-Function

Operation

The external fuel pump kit will activate the fuel pump when the key switch is in RUN and automatically disable the fuel pump in Standby mode. The fuel pump will reactivate when restarting.

Important Information

The information in this manual is intended for certified VMAC installers who have been trained in installation procedures and for people with mechanical trade certification who have the tools and equipment to properly and safely perform the installation. Do not attempt this installation if you do not have the appropriate mechanical training, knowledge and experience.

Follow all safety precautions for mechanical work. If you have difficulty with the installation, contact VMAC.

To order parts, contact your VMAC dealer. Your dealer will ask for the VMAC serial number, part number, description and quantity. To locate your nearest dealer, call 1-800-738-8622. (or visit www.vmacair.com)

Notice: Manuals and products are subject to change without notice

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Version	Revision Details	Revised by/date	Approved	Implemented
A	Release	AJH 12 Nov 2014	MP/DB 20 Nov 2014	03 Dec 2014
B	ECN 15-061: Add D600007 application	AJH 29 May 2015	CH/RD 09 Jun 2015	12 Jun 2015
C	18-090 Update wire colour	MSP 10 May 2018	JKR/AWG 15 May 2018	15 May 2018
D	18-187: Update connector and install	MRH 17 Aug 2018	MSP/NAC 22 Aug 2018	23 Aug 2018

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ITEM	DESCRIPTION	QUANTITY
1	Fuel Pump Harness	1
2	Tie-wraps	3
3	Blue Butt Connector, Crimp-Solder	2
4	Fuel pump	1

Installing the Fuel Pump

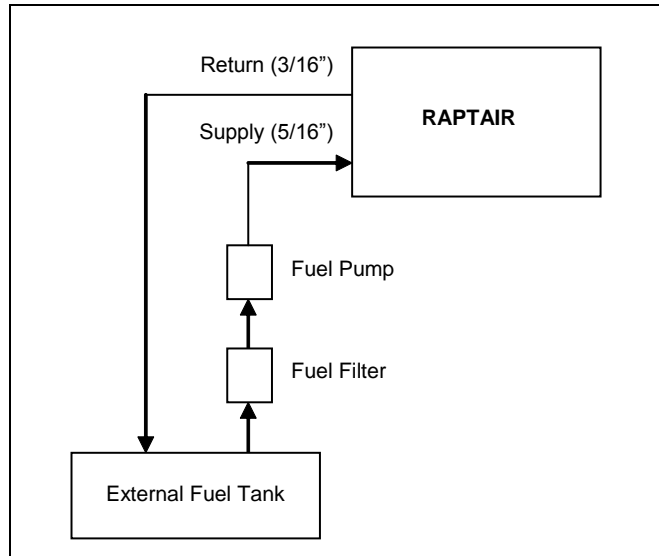


Figure 1 – Installing the fuel pump

1. Ensure the key switch is in the OFF position and remove the service panel.
2. Disconnect the battery, secure terminals so they will not contact battery posts.
3. Install Fuel Filter in supply line before fuel pump as seen in Figure 1 with Diesel compatible hose (not supplied).



Mount filter and pump as close to tank as possible (Maximum 2' from tank and no more than 6' of vertical head).

4. Ensure return line is routed back to tank with Diesel compatible hose (not supplied).
5. Ensure all connections use metal clamps to prevent leaks.



Note: Verify direction of the flow of the fuel pump and filter.

Installing the Electrical Connections

1. Locate the Black and Gray 2-Pin Fuel Pump connector at the base of machine, in the same location as the display and key-switch connectors.
2. Connect supplied harness to the Black and Gray 2-Pin Fuel Pump connector.
3. Extend Red and Black blunt cut wires to fuel pump, use supplied crimp-solder butt connectors and connect to fuel pump (Brown to Red, Black to Black). Carefully heat butt connectors after crimping to seal connections. Alternatively, solder and seal supplied harness wires to fuel pump wires (Brown to Red, Black to Black).
4. Reconnect battery.

Bleeding the fuel system.

1. Ensure the fuel level in the tank is at a suitable level and the fuel switch on the fuel filter bowl (behind the service panel) is in the on position (vertical).
2. Check and ensure that the fuel systems is sealed, that there are no fuel leaks, no kinks in the lines and that there are no points where air can be drawn into the fuel system.
3. **Ensure that the electronic primer pump is installed as close as possible to the tank** (Maximum 2' from the tank with no more than 6' of head). This is a pusher pump and not a suction pump. The primer pump filter should be installed before the pump and preferably vertically mounted.
4. Turn the key on the control panel to the first position (Do not continue to the start position)
5. Listen to hear the primer pump is running.
6. At the fuel filter bowl, (Fig 4 [A]) loosen the inlet screw and allow fuel to flow out. Use a cloth to catch the fuel surplus and allow flow to continue until there are no further air bubbles coming out. Tighten the inlet screw. Next, loosen the outlet screw and bleed until all air bubbles are gone. Tighten the outlet screw.
7. At the injector pump (Fig 4 [B]) locate the Fuel bleed screw on the side of the pump, loosen the Fuel bleed screw and allow the fuel to flow out into a cloth and again wait until the air bubbles are cleared then retighten the Fuel bleed screw.
8. Check the fuel bowl sight glass is full and proceed to start the Raptair. The Initial start will be a little rough until internal pump and injector lines are cleared of air. Run the Raptair until fully warmed.

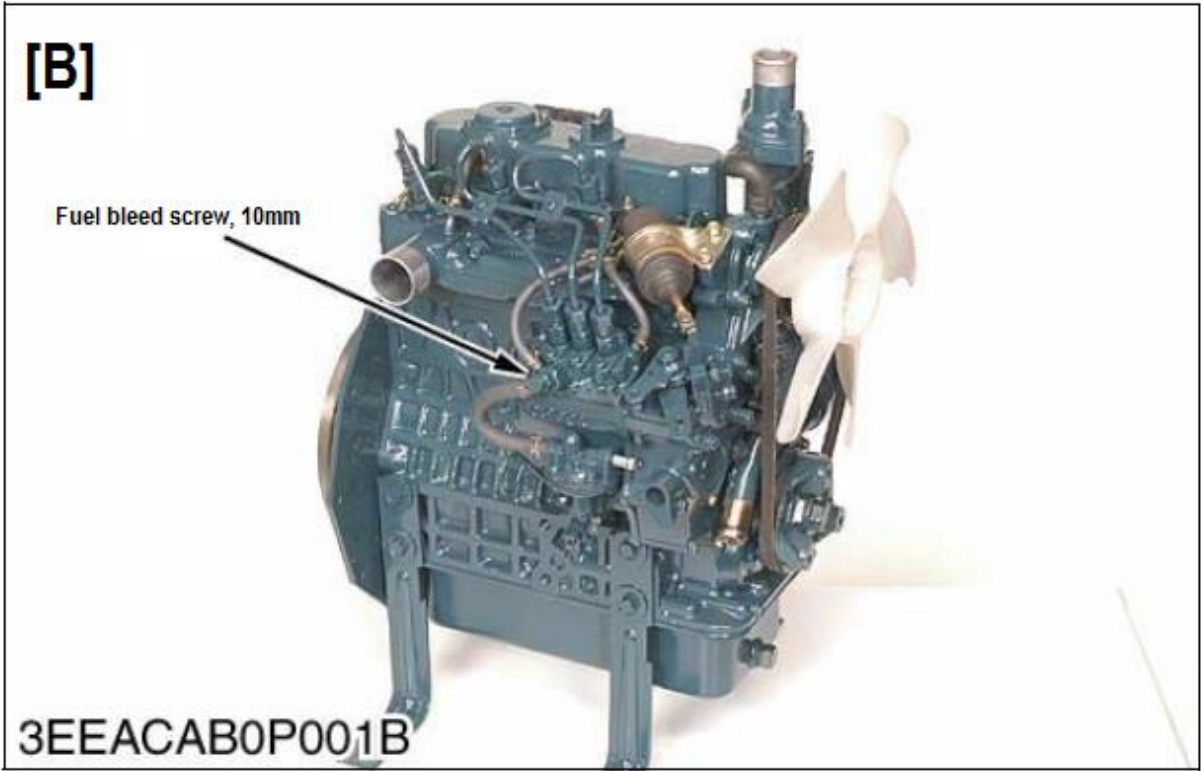
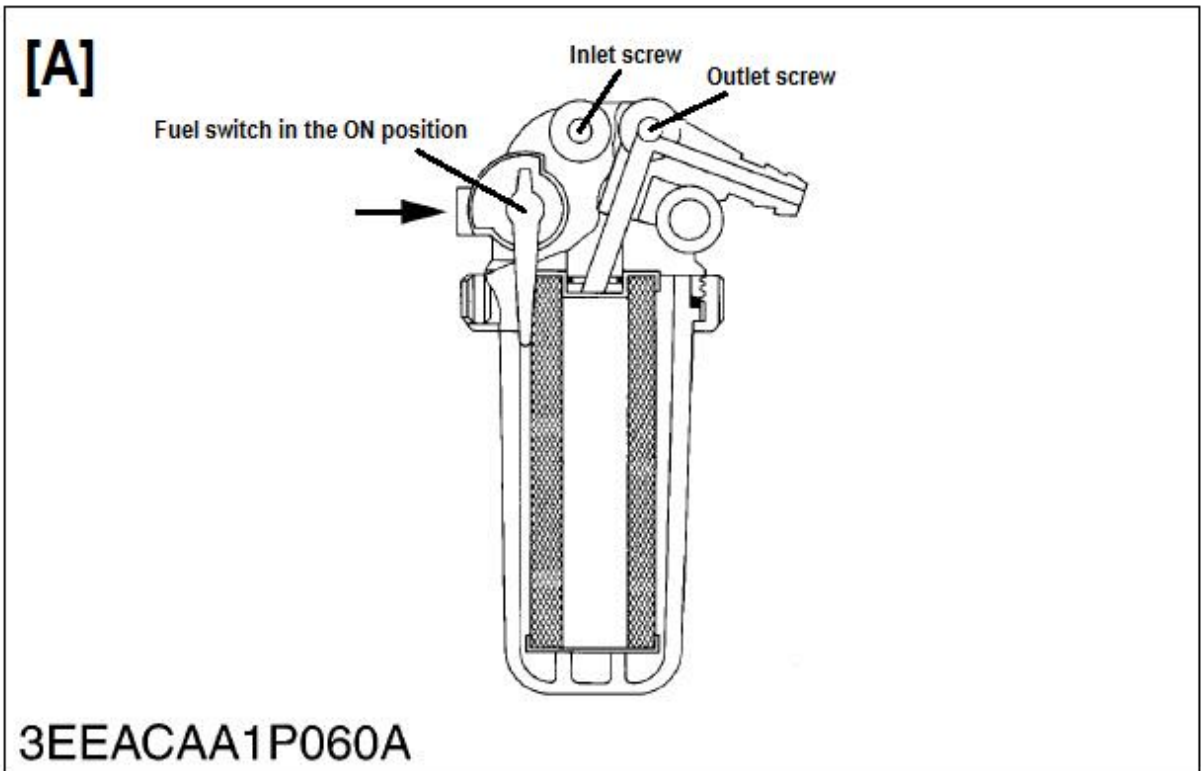


Figure 4

Testing the External Fuel Pump

1. Turn the key from OFF to RUN, the fuel pump should activate.
2. Turn the key from RUN to OFF, the fuel pump should deactivate.
3. Turn the key to RUN and start the compressor system, the fuel pump should activate and run the entire time.
4. Do not discharge air, wait until the unit enters STANDBY mode (engine shutdown and LED beacon illuminates).
5. In STANDBY mode, the fuel pump should be deactivated.
6. Dump air to allow the system to restart, the fuel pump should reactivate.
7. Turn the system off and key switch to OFF.