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UREA QUALITY SENSOR REPLACEMENT 9700 (B13R)

MODEL YEAR(S) AND VEHICLE SERIAL NUMBERS (VIN) INVOLVED

VIN				
2009	2010	2013		
3CET2M62295127372	3CET2S220A5135856	3CET2S226D5156182		
		3CET2S226D5158966		
		3CET2S222D5159595		
		3CET2S224D5159596		
		3CET2S228D5159598		

#### **DESCRIPTION**

On the vehicles affected by this bulletin, replace the prototype version of the Urea Quality Sensor #21891229 by the production version of the sensor #22073036.

#### **MATERIAL**

Order the following parts:

Part No.	Description	Qty
22073036	Urea Quality Sensor	1

NOTE	
Material can be obtained through regular channels.	

# **SPECIAL TOOLS:**

Part No.	Description	Qty
688952		
The state of the s	Extractor tool	1

# **PROCEDURE**



# **DANGER**

Park vehicle safely, apply parking brake, stop engine. In the battery box, set the battery cut-off switch to the OFF position prior to working on the vehicle.

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# **AVERTISSEMENT**

When disconnecting hoses and components, do not spill DEF onto separated connectors. If this occurs, replace the connectors immediately. Cleaning with water or compressed air will not help as the DEF quickly oxidizes metal and, due to capillary action, "creeps" along cabling at a speed of about 0.6 meters/hour.



# **WARNING**

DEF spilt onto hot components will quickly vaporize. Turn your face away!



# WARNING

Aftertreatment DEF is an irritant. Contact with DEF can irritate the skin and eyes. Inhaling DEF mist can cause lung irritation. Avoid DEF contact with skin and eyes. Avoid breathing mist created by DEF spray.

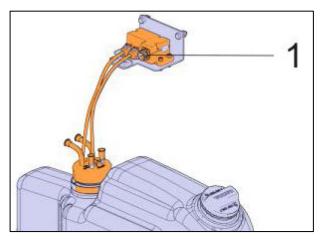
#### NOTE

- 1. If the DEF lines will remain open for an extended period of time, seal the opening to prevent crystallization of fluid in the line.
- 2. Note: Before removing appropriate coolant and DEF lines, please mark them to ensure proper reinstallation to the correct location
- 1. Locate the DEF tank on the vehicle.



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2. Disconnect the electrical harness from the DEF quality sensor module electrical connector (1).



(1) Connector on UQS module

- 3. Modify connector pin out according to FIGURE 2.
- 4. Protect with a plastic bag to avoid any DEF contamination.

Figure 1: UQS 22073036 Pin-out

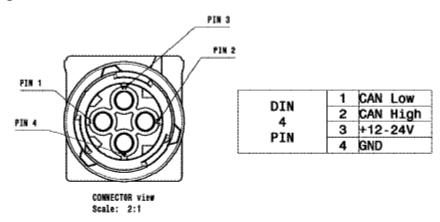
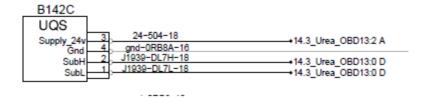


Figure 2: Schematic of connector



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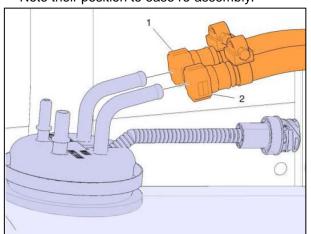
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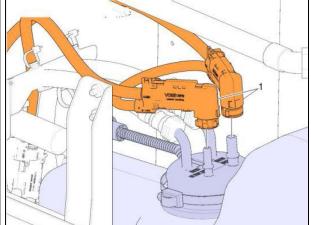
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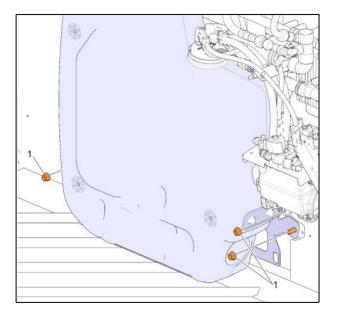
# **REMOVAL**

- 5. Clamp the heating hoses. Drain any coolant in an appropriate container.
- 6. Place a container under the DEF tank to collect any spilt DEF fluid or coolant.
- 7. Remove tank bottom plug and empty in an appropriate container.
- 8. Once the tank is empty, reinstall plug and
- 9. Disconnect coolant and DEF hoses. Note their position to ease re-assembly.





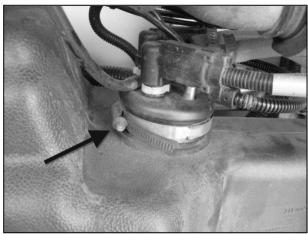
10. Remove tank to create space ton install new module.



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11. Loosen the clamp holding the sensor and remove from tank.



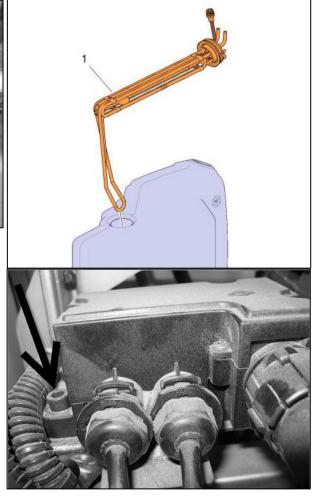
12. Un screw the four mounting screws on the electronic module. Reserve for future assembly.

# **INSTALLATION**

13. Insert the new sensor in the DEF tank and install new electronic module.

Handle the new sensor with care to avoid damage to the sensor.

- Tighten module screws to 106 lbf-in.
- Tighten clamp to 29 lbf-in



# **Warranty Bulletin**

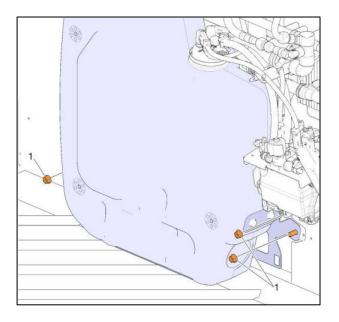
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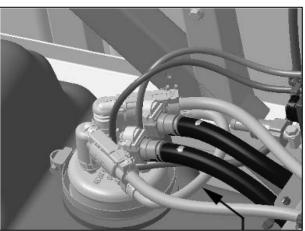
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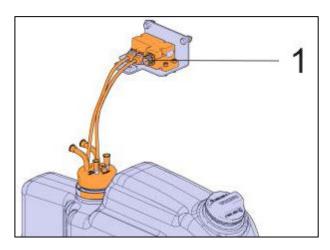
14. Install tank on vehicle.



15. Install all hoses on the sensor cap.



16. Remove the plastic bag on the connector and connect to electronic module.



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- 17. Fill the tank with new DEF fluid.
- 18. Remove clamps on the heating system hoses and fill system with coolant saved earlier.
- 19. Use tech tool to remove any error code present (DTC) and perform "Learned Data Set"
- 20. Start vehicle, detect any leaks and make sure all systems operate properly.

### PARTS / WASTE DISPOSAL

Return replaced parts to Prevost with A.F.A. for full reimbursement.

#### WARRANTY

This modification is covered by Prevost's normal warranty. We will reimburse you the parts and three hours (3.0h) of labor upon receipt of the replaced parts and a completed A.F.A. form on which you must specify as per "Warranty Bulletin Bulletin Volvo: quel logo".

#### **TELL US WHAT YOU THINK!**

We are interested in hearing your comments or suggestions regarding this bulletin. Please e-mail them to: TechnicalPublications\_prev@volvo.com

#### **OTHER**

VBC Campaign	N/A	
Fail Code	04.04-1	
Defect Code	09	
System Condition	В	
Causal Part	21891229	

Prevost engages in a continuous program of testing and evaluating to provide the best possible product. Volvo Bus, however, is not committed to, or liable for updating existing products.