

**PREVOST**

ENREGISTRÉ - REGISTERED  
ISO 9001 & ISO 14001



**WARRANTY  
BULLETIN**

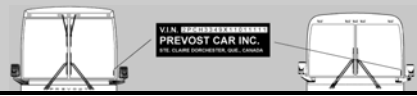
Wb11-31A

<b>DATE :</b> DECEMBER 2011	<b>SECTION :</b> 01 - Engine
<b>EXPIRATION:</b> DECEMBER 2013	
<b>SUBJECT :</b> VOLVO D13 ENGINE US10 VERSION ENGINE CONTROL MODULE (ECM), AFTERTREATMENT CONTROL MODULE (ACM) AND INSTRUMENT CLUSTER MODULE SOFTWARE UPDATES	

**APPLICATION (FOR REFERENCE ONLY)**

**NOTICE TO SERVICE CENTERS**

Verify vehicle eligibility by checking warranty bulletin status with **SAP** or **Vehicle Warranty Information** tool found on Prevost-Systems tab of the Volvo Trucks Dealer Portal

Model	VIN	
H3-41, H3-45 Coaches Model Year : 2012	From 2PCH33495CC71 <u>1887</u> up to 2PCH33496CC71 <u>1994</u> incl.	
X3-45 Coaches Model Year : 2011 - 2012	From 2PCG33496BC73 <u>5075</u> up to 2PCG33498CC73 <u>5211</u> incl.	
H3-45 VIP Motorhomes Model Year : 2011 - 2012	From 2PCVS3498BC71 <u>1886</u> up to 2PCVS3493CC71 <u>1991</u> incl.	
XLII Entertainer Model Year : 2011 - 2012	2PCYS3497BC73 <u>5089</u> 2PCYS3494CC73 <u>5133</u> 2PCY33491CC73 <u>5135</u> 2PCY33493CC73 <u>5136</u>	2PCY33499CC73 <u>5139</u> 2PCYS3493CC73 <u>5141</u> 2PCYS3495CC73 <u>5142</u> 2PCYS3497CC73 <u>5143</u>

This bulletin does not necessarily apply to all the above-mentioned vehicles, some vehicles may have been modified before delivery. The owners of the vehicles affected by this bulletin will be advised by a letter indicating the Vehicle Identification Number (VIN) of each vehicle concerned.

## DESCRIPTION

On the vehicles involved, an important engine software update must be performed as soon as possible.

The intent of this warranty bulletin is to ensure that certain Volvo D13 US10 version engine aftertreatment control modules (ACM) and engine control modules (ECM) receive the latest software upgrades which include some of the following customer enhancements:

- Improvement of fault lamp strategies.
- Inducement exit through stationary regeneration.
- Engine oil thermal control change for oil temperature reduction.
- Reduction in EGR differential pressure sensor port blocking.
- Updates to flash memory to prevent engine ECM lockup.
- Elimination of the turbocharger compressor bypass valve operation.
- Improved instrument cluster messaging. IMPORTANT, take note that this software update will implement the selective catalytic reduction system's latest driver warning and inducement measures. Keep the 3 tables « Driver warning and inducement » included at the end of this bulletin. These tables will be applicable to your vehicle after updating the software. Replace the tables found in Section 5 Other Features of your Operator's Manual.

You must make an appointment at one of PrevoSt Service Centers or PrevoSt Certified Service Providers. Please, contact your PrevoSt Regional Service Manager to find out the nearest service center location or refer to **Service** tab then **Service Network** on PrevoSt web site [www.prevoStcar.com](http://www.prevoStcar.com).

PrevoSt Action Service System (PASS) 1 800 463-7738

Regional Service Managers		
Brian Godfroid	Alberta, British Columbia, Manitoba, Montana, Saskatchewan, Washington State	1 866 770-8892
Tommy Nolet	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Upstate New York, Vermont	1 800 65-PREVO (77386)
Dennis Orner	Delaware, Maryland, New Jersey, Michigan, Ohio, Pennsylvania, Virginia, Washington DC, West Virginia,	1 855-752-9305
Kevin Laughlin	Illinois, Indiana, Iowa, Kentucky, Minnesota, Missouri, Tennessee, Wisconsin	1 800 38-PREVO (77386)
James Malcomb	Alaska, Arkansas, Kansas, Louisiana, Oklahoma, Texas	1 800 83-PREVO (77386)
Jacob Mushaney	Arizona, Idaho, Montana, Nebraska, North Dakota, South Dakota, Oregon, Utah, Wyoming	1 800 524-8770
Fernando Martinez	California, Nevada, Spanish Customers	1 800 95-PREVO (77386)
Tom Munds	Colorado, New Mexico	1 877 55- PREVO (77386)
Bryan Joy	Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina	1 866 61-PREVO (77386)
Jean Ruel	New Brunswick, Newfoundland, Nova Scotia, Prince Edward Island, Quebec	1 800 380-7738
Sylvain St-Amant	Ontario	1 888 634-5171
Bill Jensen	Hawaii, Motor Home and shell division	1 800 99-PREVO (77386)

<b>Prevost Service Centers</b>		
Quebec	850, chemin Olivier Saint-Nicolas, Quebec G7A 2N1	Toll free phone: 1-866-870-2046 Tel.: 1-418-831-2046 Fax: 1-418-831-7432
British Columbia	6537 River Road Delta, CB V4K 5B9	Tel.: 1-604-940-3306 Fax: 1-604-940-3384
New Jersey	201 South Avenue South Plainfield, New Jersey 07080	Toll free phone: 1-800-223-0830 Tel.: 1-908-222-7211 Fax: 1-908-222-7304
Florida	6931 Business Park Blvd. North Jacksonville, Florida 32256	Toll free phone: 1-800-874-7740 Tel.: 1-904-886-4555 Fax: 1-904-886-0092 Administration Fax: 1-904-886-0093 Parts
Tennessee	800 South Cartwright Street Goodlettsville, Tennessee 37072	Toll free phone: 1-877-299-8881 Tel.: 1-615-299-8881 Fax: 1-615-299-8816
Texas	15200 Frye Road Fort Worth, Texas 76155-2702	Toll free phone: 1-866-773-8678 Tel.: 1-817-685-0250 Fax: 1-817-685-0460
California	3384 De Forest Circle Mira Loma, California 91752	Toll free phone: 1-800-421-9958 Tel.: 1-951-360-2550 Fax: 1-951-360-2560 Administration Fax: 1-951-360-2565 Parts

## PROCEDURE

Service technicians, for the complete procedure, refer to *Service Center Information* **SCI11-31** available on:

- 1) Prevost service portal under **Service/Service Tips/Technical Publications/A. Service Center Information (SCI) Information Centres de Service (ICS)**
- 2) Volvo's « TRUCKS DEALER PORTAL » under **Prevost > publications > service**

## WARRANTY

This modification is covered by Prevost's normal warranty and will be performed at no charge.

The working time required to perform this warranty bulletin is approximately two (2) hours. As a matter of normal service process, your Prevost Service Center or Prevost Certified Service Provider will also check for other repair measures or outstanding warranty bulletins which might be applicable to your vehicle and this may increase the required working time.

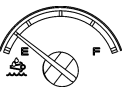

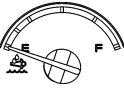

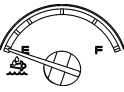

Please contact your Prevost Service Center or your Prevost Certified Service Providers for additional information and to schedule an appointment at your earliest convenience. Please mention WB11-31.

## OTHER

<b>VBC Bulletin</b>	S8745
Fail Code	01. 00-2
Defect Code	49
System Condition	B
Causal Part	3092091

IMPORTANT: take note that this software update will implement the selective catalytic reduction system's latest driver warning and inducement measures. Keep the 3 tables « Driver warning and inducement » included at the end of this bulletin. These tables will be applicable to your vehicle after updating the software. Replace the tables found in Section 5 Other Features of your Operator's Manual.




## Selective catalytic reduction – Driver warning and inducement

DEF TANK LEVEL DRIVER WARNING AND INDUCEMENT			
CONDITION	TELLTALE LIGHT AND MESSAGE IN THE DRIVER INFORMATION DISPLAY		INDUCEMENT
<p>There is only 2.6 gallons (10 liters) of DEF remaining in the tank. The actual DEF level gauge indicates about 12% DEF remaining</p> 	 lighted solid	<p><i>message:</i></p> <ul style="list-style-type: none"> <li>DEF TANK LEVEL LOW</li> <li>REFILL DEF SOON TO PREVENT ENGINE DERATE</li> </ul>	<p>none</p>
<p>There is only 0.8 gallons (3 liters) of DEF remaining in the tank. The actual DEF level gauge hand points to "E"</p> 	 flashing	<p><i>message:</i></p> <ul style="list-style-type: none"> <li>DEF TANK EMPTY</li> <li>REFILL DEF TO AVOID 5 MPH LIMIT</li> <li>ENGINE IN DERATE</li> </ul>	<p>Engine torque reduction of 25% for 1 hour then 40% torque reduction</p>
<p>The DEF tank is empty and the DEF level gauge hand points to "E"</p> <p><b>moreover</b></p> <p>a diesel fuel refueling is done and the diesel fuel level gauge increases <u>more than</u> 15% (approx. 34 gallons/130 liters)</p> <p><b>or</b></p> <p>the vehicle remains stationary (speed=0) for 20 minutes with engine off or at idle</p> 	 flashing	<p><i>message:</i></p> <ul style="list-style-type: none"> <li>VEHICLE SPEED LIMITED TO 5 mph (8 km/h)</li> <li>REFILL DEF TANK</li> </ul>	<p>Vehicle road speed limited (RSL) to 5 mph (8 km/h)</p> <p><i>Note: The vehicle has to remain stationary before 5 mph (8 km/h) road speed limit becomes active</i></p>

DEF QUALITY DRIVER WARNING AND INDUCEMENT			
CONDITION	TELLTALE LIGHT AND MESSAGE IN THE DRIVER INFORMATION DISPLAY	INDUCEMENT <sup>(1)</sup>	
Poor DEF quality <sup>(2)</sup> detected (dilution)  Emission of initial diagnostic troubleshooting code (DTC)	<b>CHECK</b>  lighted solid	<i>message:</i>  • SCR PERFORMANCE LOW  • ENGINE WILL DERATE IN XXX MINS	none
1 hour after poor DEF quality detection (chronological time after the initial tampering DTC emission)	<b>CHECK</b>  lighted solid	<i>message:</i>  • SCR PERFORMANCE LOW  • ENGINE IN DERATE  • 5 mph (8km/h) LIMIT IN XXX MINS	Engine torque reduction of 25%
3 hours after poor DEF quality detection (chronological time after the initial tampering detection)  <b>moreover</b>  a diesel fuel refueling is done and the diesel fuel level gauge increases <u>more than</u> 15% (approx. 34 gallons/130 liters)  <b>or</b>  the vehicle remains stationary (speed=0) for 20 minutes with engine off or at idle.	<b>CHECK</b>  lighted solid	<i>message:</i>  • SCR PERFORMANCE LOW  • REPAIR NEEDED  • 5 MPH LIMIT NEXT VEHICLE STOP	Engine torque reduction of 40%
		• SERVICE SCR SYSTEM  • VEHICLE SPEED LIMITED TO 5 mph	Vehicle road speed limited (RSL) to 5 mph (8 km/h)  <i>Note: The vehicle has to remain stationary before 5 mph (8 km/h) road speed limit becomes active</i>
<p><b>Conditions to temporarily exit the 5 mph (8 km/h) road speed limit inducement</b></p> <p><b>First engine restart:</b> At the first engine restart, the engine returns to the 25% torque reduction until proper DEF quality evaluation occurs. If poor DEF quality is detected during the next monitoring cycle then the 8 km/h (5 mph) speed limitation will resume after vehicle is stationary for 20 minutes.</p> <p>After the second engine restart, Premium Tech Tool is required to exit the 5 mph (8 km/h) RSL.</p> <p><b>With Premium Tech Tool:</b> Invoke 25% torque reduction until proper DEF quality evaluation occurs. If poor DEF quality is detected during the next monitoring cycle then the 8 km/h (5 mph) speed limitation will resume after vehicle is stationary for 20 minutes.</p> <p>Repeating poor DEF quality within 40 hours since correction will resume the inducement stage.</p> <p>If correction occurs during road speed limitation, repeating poor DEF quality will invoke immediate 25% engine torque reduction, then 5 mph (8 km/h) road speed limitation upon vehicle stationary state of 20 minutes.</p>			

<sup>1</sup> Correcting the poor DEF quality condition will exit inducement

<sup>2</sup> Based on a confirmed NOx sensor evaluation of measured versus predicted SCR NOx conversion

SCR SYSTEM TAMPERING DRIVER WARNING AND INDUCEMENT			
CONDITION	TELLTALE LIGHT AND MESSAGE IN THE DRIVER INFORMATION DISPLAY		INDUCEMENT
Tampering detected Tampering DTC confirmed	 lighted solid	<ul style="list-style-type: none"> <li>• SCR SYSTEM FAULT</li> <li>• ENGINE WILL DERATE IN XXX MINS</li> </ul>	none
1 hour after tampering DTC detection (chronological time after the initial tampering DTC emission)	 lighted solid	<ul style="list-style-type: none"> <li>• SCR SYSTEM FAULT</li> <li>• ENGINE IN DERATE</li> <li>• 5 mph (8km/h) LIMIT IN XXX MINS</li> </ul>	Engine torque reduction of 25%
3 hours after tampering detection (chronological time after the initial tampering detection)  <b>moreover</b> a diesel fuel refueling is done and the diesel fuel level gauge increases <u>more than</u> 15% (approx. 34 gallons/130 liters)  <b>or</b> the vehicle remains stationary (speed=0) for 20 minutes with engine off or at idle.	 lighted solid	<ul style="list-style-type: none"> <li>• SCR SYSTEM FAULT</li> <li>• 5 MPH LIMIT NEXT VEHICLE STOP</li> </ul>	Engine torque reduction of 40%
		<ul style="list-style-type: none"> <li>• SCR SYSTEM FAULT</li> <li>• VEHICLE SPEED LIMITED TO 5 mph</li> </ul>	Vehicle road speed limited (RSL) to 5 mph (8 km/h)  <i>Note: The vehicle has to remain stationary before 5 mph (8 km/h) road speed limit becomes active</i>
<p>Correcting the SCR tampering condition will exit inducement.</p> <p>Repeating SCR tampering within 40 hours since correction will resume the inducement at the same inducement stage and timer status existing at the time of correction.</p> <p>If correction occurs during road speed limitation, repeating tampering will invoke immediate 25% engine torque reduction, then 5 mph (8 km/h) road speed limitation upon vehicle stationary state of 20 minutes.</p>			