



## Volvo Models

**Volvo Model** VNR , VNX , VNL , VHD , VAH

## Engine family

Engine family 11L Engine , 13L Engine

## Emission Standard

Emission Standard US17 GHG

**\*\* SOLUTION \*\***

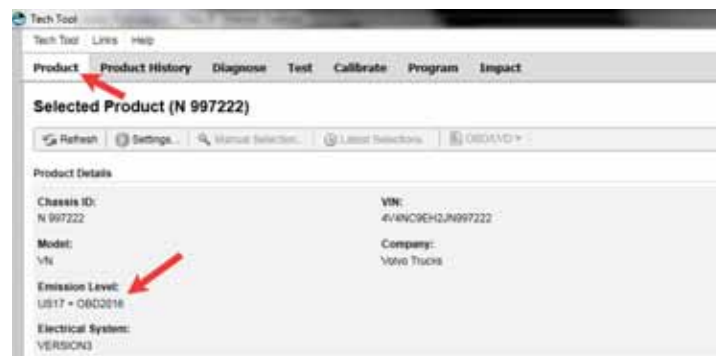
**Title** Volvo Chassis - Vehicles Equipped With A Vertical Selective Catalytic Reduction (SCR) System - Diagnostic Trouble Codes ( DTC ) P1031 With Possible P24DA Lighting The Malfunction Indicator Lamp ( MIL ) - **US17+OBD16 (GHG17, Common Rail Fuel System) Emissions, Commonly Model Year 2018**

**Cause** Fault Code P1031 - Particulate Matter (PM) Sensor Clogged Tip may occur in GHG17 vehicles that are equipped with a vertical SCR catalyst. P1031 may be accompanied by P24DA - PM Sensor Exhaust Sample Error. When the Confirmed DTC status is checked in Detailed Fault Information from the Diagnose screen in Premium Tech Tool (PTT), status will show True.

**Solution** **DO NOT Replace the PM sensor for P1031 and/or P24DA prior to performing the steps below.**

### Verify the chassis emissions level

- Details can be found in the Product Details box on the Product tab in PTT as seen below:



**Review the Detailed Status Information for the relevant code on the DTC Readout.**

Control Unit	DTC	Status
Brake ECU (MD 13B)	SID 69: Axel load sensor FM 2: Data erratic, intermittent, or incorrect	Active
Engine Control Module (EMS)	P229F6: NOx Sensor Gas Outlet Removed, Signal Plausibility Failure	Active

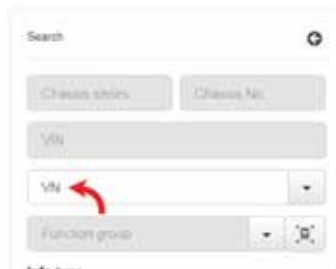
NOx Sensor Gas Outlet Removed

Detailed status information

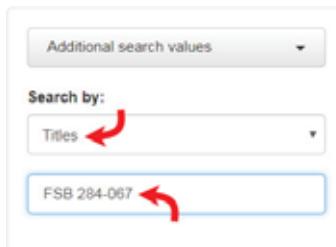
Title	Value
Confirmed DTC	True
Pending DTC	False
Test failed	True
Test failed since last clear	True
Test failed this operation cycle	True
Test not completed since last clear	False
Test not completed this operation cycle	False
Warning indicator requested	False

**Once the chassis is confirmed to be US17+OBD16 or US17+OBD18:**

- Software improvements have been released to address this code.
- Refer to [FSB 284-067 Engine Control Module \(EMS\) and Aftertreatment Control Module \(ACM\), Reprogramming](#).
  - The bulletin can be found under the Service tab in Impact by searching for either the FSB number, or by reviewing the articles under [Function Group 284](#).
  - If the article does not appear when searched with either VIN or Chassis information entered, search by model:
    1. Clear any chassis information from the Search box.
    2. Select or enter VN as the model.



3. Make sure Title is selected in the Search By field. Enter "FSB 284-067" in the text entry field.



4. Press the Search button. The operation will appear in the results window.

Fgrp	Title	Info type	ID/Operation
284	FSB 284-067, Engine Control Module (ECM) and Aftertreatment Control Module (ACM) Reprogramming	Repair	2543-22-05-15

5. Multiple article choices will appear. Find the Operation for the correct Chassis.

**Note:** It is possible that more than one choice will have the same title (as shown below). Despite having the same title, the Operations are different and should be reviewed to locate the correct procedure.


FSB 284-067, Engine Control Module (ECM) and Aftertreatment Control Module (ACM), Reprogramming

Description	ID	Date
VN, ENG/VE11, EM-USA17, Assembly Date 2017-01-01 - 2018-03-01		09/06/2018
VN, ENG/VE13, EM-USA17, Assembly Date 2017-01-01 - 2018-03-01		
VN, ENG/VE16, EM-USA17, Assembly Date 2017-01-01 - 2018-03-01		

6. Following software updates, perform Operation [2589-08-03-17 After-treatment Particulate Sensor, Diagnostic Monitor](#) found under the Test tab in Premium Tech Tool (PTT) to verify that there are no further issues.

**If software is current according to the bulletin,** refer to CBR Solution [K47547856](#) for further information.

**If other symptoms or related codes are present,** normal diagnostics will need to be performed to determine the cause.

NA_Sister solutions	<a href="#">K00527512</a> , <a href="#">K59554255</a> , <a href="#">K47547856</a>
Campaign code	FSB284-067
Solution visibility	<a href="#">Dealer distribution</a>
<b>Function(s)/component(s) affected</b>	
Function affected	FSB , DPF , SCR , 1 1 0 EMS , 2 1 0 ACM , Diagnostic tool
<b>Function Group</b>	
Function Group	254 catalytic converter; exhaust emission control equipment , 258 emissions after-treatment , 284 control system, fuel supply
<b>Customer effect</b>	
Main customer effect	soot , calibration/programming/pairing/missing operation , diagnostics/methodology , fault code/display
Lights/Messages on information display	 Driver's information warning pictogram
<b>Fault code(s)</b>	
OBD 2013 Diagnostic Trouble Codes	P1031 , P103100 , P24DA
<b>Conditions</b>	
Vehicle operating mode	when driving , when stationary

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Frequency of occurrence of problem	random
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### **Administration**

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Author	UT0031H
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Dealer ID	UT0031H
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Last modified by	RU4469V
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Creation date	27-04-2018 16:04
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Date of last update	18-06-2018 15:06
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Review date	31-03-2019 00:03
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Status	Published
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NA_Reviewer	ut0031h
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NA_Author_Group	GTT
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