

Instruments - Fuel Gauge Reads '0' With Fuel In Tank

Retailer Technical Journal 22294

Fuel level shows 0 even with fuel in tank

Date 02-03-2010

Reference:

VIDA DTC information

Note!

If using a printed copy of this Retailer Technical Journal, first check for the latest online version.

Model	Type	Model year	Chassis range
S80	184	2005-2006	390000-446916
XC90	275	2005-2010	134000-553921
V70	285	2005-2008	459000-693560
XC70	295	2005-2008	173000-288671
S60	384	2005-2009	425000-741211

AFFECTED VEHICLES

DESCRIPTION:

The fuel gauge may intermittently show 0 in the DIM (Drivers Information Module). Customers may also report that the fuel level will show correctly after a key cycle. The following DTCs (Diagnostic Trouble Codes) will be set with an intermittent status:

DIM 0001 Driving distance. Incorrect value

CEM 4A31 Ejector sensor. Faulty signal (ejector side) Only posted on cars with 2 sensors.

CEM 4A35 Fuel level sensor. Faulty signal (pump side)

PRODUCT MODIFICATION: The root cause has been found within the CEM (Central Electronics Module) software. The CEM loses the distance information for 0.2 seconds and then goes back to its correct value. DTC CEM-4A35 and/or 4A31 will be set as a result of the CEM not being able to see the fuel level drop during a set distance. This will cause CEM to send out a low quality value for the fuel level signal that the DIM cannot interpret.

New CEM software has been introduced for service and production for all affected vehicles at the chassis end limits above.

NOTE:

There are vehicles built between Structure weeks 200425 and 200448 equipped with CEM Hardware part numbers (HW PN) that will not accept the SW correction package. Those CEM Hardware part numbers are:

- 30728357
- 30682981
- 30682982

The CEM HW PN can be identified in VIDA Vehicle Details / HARDWARE and SOFTWARE

Hardware and Software

Order ID: 4664354066677662

SP No: 30677017

Note! These values are from the latest confirmed version.: 2009-12-21 17:19:53.0

	Control Module	Part No	Hardware Serial No	Software Part No
+	AUM	30737708	000049287125	
+	BCM	30643982	000000083605	
+	CEM	30710717	000077114903	
+	CEM-H	30728357	000004762374	
+	DDM	30658697	000000133291	
+	DIM	30682290	000001442489	
+	ECM P	30668478	000000037710	

In this case, there will be a SW package delivered and loaded; however, the package will **not** include the correction for the fuel gauge symptoms.

If the vehicle is equipped with one of the CEM hardware P/Ns mentioned, the CEM must be replaced and reloaded to correct the symptoms described above.

SERVICE: If the customer reports the symptoms described above and the vehicle is within the chassis number limits in the affected vehicle table, Please perform a CEM upgrade P/N 30677017. Please see note above

WARRANTY CLAIM INFORMATION		
LABOR OP	LABOR DESCRIPTION	LABOR TIME
36004-2	Software control module downloading	See VSTG
- Claims may be submitted under the new car warranty when there is a documented customer complaint using claim type: 01		
- Labor times are valid at the time of release and are subject to change.		

WARRANTY CLAIM INFORMATION