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	Туре	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 looses 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.

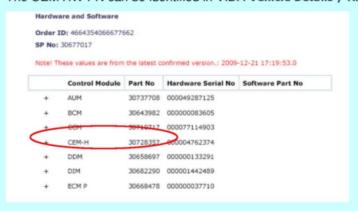
New CEM software has been introduced for service and production for all affected vehicles at the chassis end limits above.

## 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



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				

WARRANTY CLAIM INFORMATION