

Check Engine diagnosis warning lamp light up, engine jolts, shakes

Topic number	LI47.20-P-061013
Version	1
Design group	47.20 Fuel pump, filter
Date	03-16-2015
Validity	MODEL 222 ###, AMG only MODEL 217 ###, AMG only
Reason for change	

Complaint:

Check Engine (CEL) diagnosis warning lamp active

The following fault codes may be set in the engine control unit:

P008700 The fuel pressure in the system is too low

The following fault codes may be set in the fuel system control unit:

P008A00 The pressure in the fuel low-pressure circuit is too low

P254000 The signal for the pressure sensor of the fuel low-pressure circuit is implausible

Cause:

Internal in tank leakage of the assembly of the fuel pump module

Attachments	
File	Description
Arbeitsanweisung Kraftstofffördermodul BR222_217 für TIPS_2.pdf	Pictures for troubleshooting

Remedy:

If the engine exhibit the condition as running low on fuel even though the fuel gauge indicates that there is still enough fuel remaining (e.g. 15%), the following test steps must be performed:

1. Read out the actual value "Current duty cycle of fuel pump" (074) - Fuel System Control Unit (FSCU) in Xentry.

If the value is greater than 50% with the engine idling (<1000 rpm), the sending unit must be replaced.

2. Read out the actual values "Left fill level sensor" (009) and "Right fill level sensor" (247) - Fuel System Control Unit (FSCU) in Xentry. Refuel vehicle with at least 10 liters of fuel. Run engine at idle for approx. 15 min. Read out actual values again and make a note of any changes.

If the situation relates to that described in the "Cause" section the values of the fill level would change unevenly from the left to the right side. Then follow with the test 3.

3. Open fuel tank service access panel and check the following connectors (refer to the attachment)

Fig.1: Is the feed outlet plugged in at the feed module?

Fig.2: Is the connector plugged in on the bowl of the suction jet pump?

Fig.3: Is the suction jet pump transfer connector plugged in?

Fig.4: Is the return line clipped in and the float-and-lever sensor unobstructed?

All connections must be properly secured.

If the corrections / repairs were performed as outlined above and the vehicle exhibit the condition again (or shortly after) as described in the "Complaint" section, then the replacement of the fuel tank must be considered.

Note:

Refer to EPC to specify replacement parts if needed.

If the situation / complaint cannot be resolved, please involve DTS and / or facing FTS. Please include the TPR 242073523 number and this LI number in notes.

Control unit/fault code		
Control unit	Fault code	Fault text
ME - Motor electronics 'MED177V6LA' for combustion engine 'M276 Abgasturbolader' (N3/10)	P008700	The fuel pressure in the system is too low. _
FSCU08 - Control unit 'Fuel pump' (N118) (FSCM_GEN4)	P254000	The signal for the pressure sensor of the low-pressure fuel circuit is implausible. _
FSCU08 - Control unit 'Fuel pump' (N118) (FSCM_GEN4)	P008A00	The pressure in the fuel low pressure circuit is too low. _

Work units				
Op. no.	Operation text	Time	Damage code	Note
			47N06 H2	If the sensor linkage is jammed
			47041 B2	If the fuel levels in the tank halves are unequal
			09001 53	If the duty cycle is greater than 50% and the pump is replaced
			47061 04	Connector at feed module loose