

Check engine light with DTC 256809: PremAir sensor has a malfunction

Topic number	LI07.04-P-061585
Version	1
Design group	07.04 Senders, sensors
Date	06-08-2015
Validity	S400 (221.195) Hybrid
Reason for change	
Reason for block	

Complaint:

Check engine light is illuminated.

Cause:

Engine SW correction for PremAir sensor diagnosis.

Remedy:

1. Print-out and or save a copy of the initial short test, fault code freeze frame data via the ME DTC menu, and a ME ECU log.
2. Insure that the vehicle has not been in an accident.
3. Insure that the correct radiator is installed (PZEV radiator = black catalytic coating).
4. Insure the radiator is not damaged or obstructed.
5. Perform a function test of the premain sensor (code must be present). If the test does not pass, then erase the code and perform a function test via the guided test menu. In the event the function test is performed on a hybrid model, then monitor if the function test is inconclusive (i.e. there are no test result data at the conclusion of the test [numerical or graph]).
6. Check glycol/water mixture.
7. Check the ground circuit of the premain sensor via a DVOM first and then visually (ground stud must be clean).
8. Check pin bushing tension of premain sensor connector.
9. If steps 1-8 are OK, Update the ME17.7 control unit with the latest software using add-on 4585 for XENTRY version 05/2015 or later

Symptoms
Power generation / Engine management / Engine management indicator lamp / Engine diagnosis / lit

Control unit/fault code		
Control unit	Fault code	Fault text
MED 17.7-Motor electronics for direct injection 17.7 (MED177)	P256809	The PremAir sensor has a malfunction. There is a component fault.

WIS-References			
Document number	Title	Note	Allocation
AR07.04-P-5004GZH	Remove/install radiator identification sensor		Parts

Validity		
Vehicle	Engine	Transmission
221.195	*	*

Full model designation breakdown		
Vehicle	Engine	Transmission
221.195	272.974	722.950