
C117 with M270 engine Check Engine Light on for ME DTC P052E71 "Positive Crankcase Ventilation Regulator Valve Performance actuator stuck"

Topic number	LI07.70-P-058650
Version	2
Design group	07.70 Direct injection gasoline injection and ignition system
Date	03-08-2014
Validity	M270
Reason for change	Updated cause
Reason for block	

Complaint:

Check Engine Light illuminated in instrument cluster

DTC P052E71 stored in ME control unit

Cause:

Currently there are 2 possible causes:

1. The electrical connectors for Partial load crankcase ventilation valve (Y58/2) and connector for Thermostat heating element (R48) are reversed

****Note**** Y58/2 and R48 are mounted in close proximity and use same type of electrical connector, it's possible to reverse these connectors.

2. Partial load operation crankcase ventilation valve (Y58/2) and/or connections are faulty

Remedy:

****The following steps should be carried out when engine is cold****

Remedy:

1. Perform SDS guided test for R48 "Thermostat heating element" (see pg 2 of attachment)
2. Evaluate test results as explained in attached document. (see pg 3 of attachment)
3. If test result is ok as per attached instructions proceed to step 6
4. If test result is NOT ok as per attached instructions, proceed to step 5
5. Reverse connections at R48 and Y58/2. proceed to step 6
6. Connect socket box (A129-589-00-21-00) and adaptor harness (A266-589-01-65-00)
7. Do not connect test harness ends at ME control unit
8. Remove relay (F58kN) from F58 (engine compartment fuse and relay box)
9. Measure resistance between pin 3 of socket box and F58kN pin 5: Spec = ~ 25-35Ω
10. Measure resistance between pin 4 of socket box and F58kN pin 5: Spec = ~ 8-10Ω
11. If measured value of step 8 is not within spec, check wiring and connections at Y58/2 and ME control unit. Repair as necessary
12. If measured value of step 8 is within spec, proceed to step 13

13. Erase DTCs
14. Perform 2 consecutive drive cycles
15. If P052E71 does not return, release vehicle to customer
16. If P052E71 returns during road test or at a later date open a PTSS case

When opening a case, please attach the following documentation:

- Quick test
- ME control unit log
- Results of measurements in remedies 1&2 including screen shots and resistance values

Attachments	
File	Designation
Supporting Documentation for LI07.70-P-058650 2014_03_05.pdf	Supporting documentation for LI07.07-P-058650

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

Control unit/fault code		
Control unit	Fault code	Fault text
ME - Motor electronics 'MED40' for combustion engine 'M274' (N3/10)	P052E71	The valve for crankcase ventilation has a malfunction. The actuator is blocked.

Validity		
Vehicle	Engine	Transmission
117.342	270.910	*
117.343	270.910	*
117.344	270.920	*
117.345	270.920	*
117.346	270.920	*