Fault code(s) 13BA00, 13BB00, 13BC00, 13BD00, 13BE00, 13BF00 - Maximum actuation period exceeded during zero quantity calibration for injector of cylinder x stored in engine control unit

Topic number	LI07.16-P-055799
Version	2
Design group	07.16 Common rail diesel injection system
Date	06-06-2013
Validity	BR 166 with OM642 LS BR 221 with OM642 LS
Reason for change	Added 221 and changed Text
Reason for block	

Complaint:

Fault code(s) 13BA00, 13BB00, 13BC00, 13BD00, 13BE00, 13BF00 - Maximum actuation period exceeded during zero quantity calibration for injector of cylinder x stored in engine control unit.

Cause:

Fault reason currently being analyzed.

Remedy:

- Perform Guided test per SDS and include all measured values in the case

- Test Compression (3-5 times for averaging)

- Verify - Injector quantity adjustment values stored in the CDI control unit match the imprinted code on the injectors (Injector Coding)

- Check / Verify - Quantity correction values of smooth running control are in specification

If the above testing shows no issue please proceed as follows:

- Create a PTSS case

- Do not replace any hardware and do not perform any further repairs for the time being.

- No reset of zero quantity calibration values or reset of the IMA/ ISA codes required

- Gather the following information and document it in the PTSS case:

- Customer drive profile (short haul, long haul - urban, freeway, off-road,...)

- Exact description of external conditions at time engine warning indicator came on

- Original Initial Quick Test Log

- Performance data

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- Print out of Compression tests (3-5 for averaging),

- Printout showing injector coding was checked,

- Quantity correction values of smooth running control (found under CDI/ Actual values/ Fuel system/ Quantity Correction value of smooth running control)

Note: Do not reset learned values of the zero quantity calibration.

Symptoms
Power generation / Engine noise / Clattering
Power generation / Engine noise / Combustion noise
Power generation / Engine noise / Rings/knocks

Control unit/fault code		
Control unit	Fault code	Fault text
CDI - Motor electronics 'CDI60LS' for combustion engine 'OM642' (N3/9) (CR60LS) (M (166))	13BE00	Maximum actuation duration for zero quantity calibration for fuel injector of cylinder 3 exceeded
CDI - Motor electronics 'CDI60LS' for combustion engine 'OM642' (N3/9) (CR60LS) (M (166))	13BC00	Maximum actuation duration for zero quantity calibration for fuel injector of cylinder 2 exceeded
CDI - Motor electronics 'CDI60LS' for combustion engine 'OM642' (N3/9) (CR60LS) (M (166))	13BA00	Maximum actuation duration for zero quantity calibration for fuel injector of cylinder 1 exceeded
CDI - Motor electronics 'CDI60LS' for combustion engine 'OM642' (N3/9) (CR60LS) (M (166))	13BB00	Maximum actuation duration for zero quantity calibration for fuel injector of cylinder 4 exceeded
CDI - Motor electronics 'CDI60LS' for combustion engine 'OM642' (N3/9) (CR60LS) (M (166))	13BF00	Maximum actuation duration for zero quantity calibration for fuel injector of cylinder 6 exceeded
CDI - Motor electronics 'CDI60LS' for combustion engine 'OM642' (N3/9) (CR60LS) (M (166))	13BD00	Maximum actuation duration for zero quantity calibration for fuel injector of cylinder 5 exceeded

Validity		
Vehicle	Engine	Transmission
M (166)	642	*
S (221)	642	*

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