Measure no.	Subject		
US 64351344-01	Lurching at partial load/idle speed		
Status date (mm/dd/yy)	Status	Organization	
7/20/18	Accepted	US, MOT	
Date created (mm/dd/yy)	Created by	PQM Problem reference	
7/20/18	Annett Salzmann		
Release date (mm/dd/yy)	Approved by	Dealer release	
		Allow automatic release	
Vehicles affected			
E series	Engine	Body	
K46/12 K46/13 K47 K47/11 K49			
Production period (from/to)		Feedback (all cases relating to	
(mm/dd/yy)	Comment on production period	measure up to) (mm/dd/yy)	
/			

Complaint

Lurching at partial load range and Idle speed is unstable

Cause

Cold/short-distance drives at low speeds can increase oil residues and contamination deposits on the intake valves and consequently on the throttle valve. Contamination can also increase with the use of substandard fuel and/or engine oil with additives. The result is lurching at partial load in the low to middle engine speed range and cannot be remedied when ridden in this manner.

This high-performance engine was not developed to operate under cold/short distance drives at low speeds. The customer should be informed of the disadvantages of increased maintenance when used in such a way.

Regular journeys at high speeds > 9.000 rpm, for example on the motorway, can help to burn off contaminated valves and prevent contamination of the throttle valves.

Measure

The product was precision designed and reacts adversely to contamination. Altering the product is out of the question due to homologation reasons.

The throttle valve position is monitored by the engine control unit (BMS-X or BMS-MP). With increasing contamination, the throttle valve must open wider for the same air flow when idling or close to idling. As of I level K001-18-07-500, once a certain threshold value is reached, a fault entry is set.

BMS-X: 0x21F900 "Throttle valve contamination"

or

BMS-MP: 0x3A18F0 "Throttle valve contamination"

If either fault code is stored, the service function "Clean throttle valves" is automatically added to the test plan. In this case check the throttle valve and valves for contamination and clean them.

If the fault code is not stored, but the service function is deemed necessary, please proceed as follows:

After the vehicle test (read fault memory), select the fault pattern "Throttle valves contaminated, cleaning necessary" and add to test plan. The service function "Clean throttle valves" then appears in the test plan.

The guide for cleaning the throttle valve system is now also available in AIR under main group 13.

The intake valves are still cleaned as previously:

- 1. Remove contaminated valves and soak in brake cleaner
- 2. Remove contamination with a soft sponge

3. If there is also contamination on the valve seat, remove this carefully using a soft sponge.

Cleaning the throttle valves/intake valves is not covered under warranty or goodwill.

The software update can be invoiced using a temporary defect code: Defect code: 13 61 99 00 00 "control unit - fault saved in diagnosis memory (without warning light)"

Flat rate units:

61 00 002 Check software, 3 FRUs

+ 61 00 510 Program vehicle control unit, 1 FRU

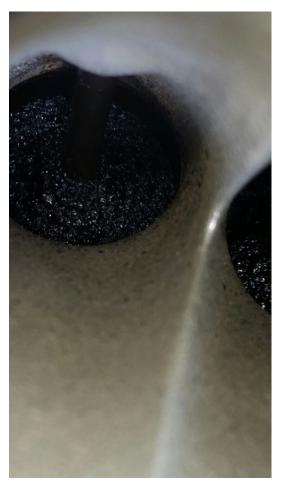
This invoicing is limited until 01/07/2020.

Co	Complaint						
	Faul	t location F	ault type	Fault place	Fault conditions		
×.	Constant-speed driving Rou		ough running / engine		Speed up to 1000 rpm		
		S	peed variation		Speed 1000-2000 rpm		
					Speed 2000-4000 rpm		
Cause							
F	#	Fault location	Fault type	Fault place			
	1	11/34 Intake valve					
		Repair Task	Special Clearance	Area			
		Checking, repairing,	No	Powertrain			
		replacing					
	#	Fault location	Fault type	Fault place			
ŀ	2	13/54 Throttle-valve stu	b Surface fault	Front			
		assembly					
		Repair Task	Special Clearance	Area			
		Checking, repairing,	No	Powertrain			
		replacing					
ŀ	#	Fault location	Fault type	Fault place			
	3	13/61 DME engine	Revision index old				
		control unit					
		Repair Task	Special Clearance	Area			

Program/encode	Yes	Powertrain	
Fault code			
Progman / DIS / ISTA / ISTA/	P		
System	State	Version	

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Example 2:

