Engine diagnosis indicator lamp lights up in instrument cluster and fault code P203B00 is stored in the AdBlue® (SCR) control unit

Topic number	LI14.40-N-069569
Version	2
Function group	14.40 Exhaust aftertreatment, AdBlue
Date	09-09-2019
Validity	Model 906 as from 01.07.13 with engine 651 Model 906 as of 01.07.13 with engine 642
Reason for change	Remedy added for noticeable problems with the capilla- ry stop connectors of the electric lines between the Ad- Blue® control unit (SCR) and the AdBlue® tank module (A102).
Reason for block	

Complaint:

Engine diagnosis indicator lamp lights up in instrument cluster and fault code P203B00 stored in AdBlue® (SCR) control unit.

Cause:

- Erroneous refueling of AdBlue® tank.
- Poor contact of AdBlue® fill level sensor on electrical plug of AdBlue® tank module (A102).
- Temporary resistance in the capillary stop connectors of the electric lines between the AdBlue® control unit (SCR) and the AdBlue® tank module (A102).

Remedy:

1. Visually inspect AdBlue® tank for signs of erroneous refueling.

<u>Information</u>: To do so, check the AdBlue® concentration level (see AR14.40-D-2041S for model 906). In the event of any erroneous refueling, the repair work must be conducted as per the procedure in the Service Information bulletin SI14.40-S-0014A.

2. Check function of AdBlue® fill level sensor using actual values for fill level of AdBlue® tank (absolute value) in XENTRY Diagnosis.

Information: Extract approx. 2-3 liters of AdBlue® from AdBlue® tank (see AR14.40-D-2014-02A and AR14.40-D-2014-02S for model 906), the fill level in the AdBlue® tank must change accordingly. If there is no change in the fill level in the AdBlue® tank, research further to determine reason for problem and introduce appropriate repair measures.

3. Check electric lines between AdBlue® (SCR) control unit and AdBlue® fill level sensor in AdBlue® tank module (A102) (see picture 01).

<u>Information</u>: If there are any noticeable faults with the electric lines between the AdBlue® (SCR) control unit and the AdBlue® fill level sensor in the AdBlue® tank module (A102), appropriate repair measures must be introduced.

4. Replace coupling housing, contact sockets and single conductor seals of electrical plug on the AdBlue® tank module (A102) (pins 3, 4 and 5 (contacting of fill level sensor)) (see picture 01).

<u>Information</u>: Conduct only when operation steps 1, 2 and 3 are conducted without any noticeable problems. To repair the electrical plug, please refer to documents AR00.19-D-0100A (model 906), and AR00.19-S-0120E.

<u>Note:</u> In the event of noticeable problems with the capillary stop connectors of the electric lines between the Ad-Blue® control unit (SCR) and the AdBlue® tank module (A102), the capillary stop connectors must be replaced with solder terminal connectors in accordance with the relevant instructions (see AR00.19-P-0100-09A).

<u>Info:</u> For the layout of the capillary stop connectors of the electric lines between the AdBlue® control unit (SCR) and the AdBlue® tank module (A102), see picture 03.

Attachments	
File	Description
01.jpg	Pins 3, 4 and 5 (contacting of fill level sensor) of electrical plug on AdBlue® tank module (A102) (model 906).
03.jpg	Layout of capillary stop connectors of the electric lines between the AdBlue® control unit (SCR) and the Ad-Blue® tank module (A102).

Symptoms
Power generation / Engine management / Indicator lamp / Engine diagnosis / lit
Power generation / Engine management / Function / Malfunction

Control unit/fault code		
Control unit	Fault code	Fault text
N141 - Selective catalytic re- duction SCRCM3	P203B00	The AdBlue® fill level sensor has a malfunction

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 211 545 11 28			Coupling housing	1		Х
A 013 545 15 26			Female contact	3		Х
A 000 545 71 80			Single-wire seal	3		Х
A 001 546 99 41			Solder terminal connector		As required.	Х

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
54-1011	PERFORM QUICK TEST			
47-0643	SEPARATE PARTS OF ADBLUE(R) SYSTEM: CHECK AC- CORDING TO FAULT CODES			
54-9201	REPLACE ELECTRICAL CONNECTOR FOR		47072 73	AdBlue(R) tank fill level sensor (E) - electrical fault Information: Conduct only when operation steps 1, 2 and 3 are con- ducted without any noticeable pro- blems. The listed damage code is not to be considered as an acceptance of costs. The general guidelines in the Warranty Manual apply.

WIS-References			
Document number	Title	Note	Allocation
AR00.19-D-0100A	Wiring harness general re- pair methods	Model 906	Remedy
AR00.19-S-0120E	Remove contacts from connectors, couplings		Remedy
AR14.40-D-2014-02A	Empty/fill AdBlue tank	Engine 642 in model 906 with code KP2 (AdBlue tank, 12 I, in engine com- partment) and with code MH1(Low-pollutant engine EPA 10 / CARB) Engine 642 in model 906 with code KP2 (AdBlue tank, 12 I, in engine com- partment) and with code MH3 (Low-pollutant engine EPA 13 / CARB) Engine 642 in model 906 with code MA6 (Emissions class, Euro 6b N1 GR.III/ N2) and except code KP2 (AdBlue tank, 12 I, in engine compartment) Engine 642 in model 906 with code MB6 (Low-pollu- tant vehicle, Euro 6 Gr. 1) and except code KP2 (Ad- Blue tank, 12 I, in engine compartment) Engine 642 in model 906 with code MB6 (Low-pollu- tant vehicle, Euro 6 Gr. 1) and except code KP2 (Ad- Blue tank, 12 I, in engine compartment) Engine 642 in model 906 with code MH5 (Low-pollu- tant engine EPA 14/CARB) and except code KP2 (Ad-	Remedy

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		Blue tank, 12 I, in engine compartment) Engine 642 in model 906 with code MH7 (Low-pollu- tant engine EPA 16/CARB) and except code KP2 (Ad- Blue tank, 12 I, in engine compartment) Engine 642 in model 906 with code MP6 (Euro VI en- gine version) and except co- de KP2 (AdBlue tank, 12 I, in engine compartment) Engine 651 in model 906 with code MA6 (Emissions class, Euro 6b N1 GR.III/ N2) Engine 651 in model 906 with code MB6 (Low-pollu- tant vehicle, Euro 6 Gr. 1) Engine 651 in model 906 with code MH5 (Low-pollu- tant engine EPA 14/CARB) Engine 651 in model 906 with code MH8 (Low-pollu- tant engine, SULEV) Engine 651 in model 906 with code MI8 (Low-pollu- tant engine, SULEV) Engine 651 in model 906 with code MI6 (Emissions class, PROCONVE L6) Engine 651 in model 906 with code MP6 (Euro VI en- gine version)	
AR14.40-D-2014-02S	Empty/fill AdBlue tank	Engine 642 in model 906. 6/7 with code MH1 (Low- pollutant engine EPA 10 / CARB) and except code KP2 (AdBlue tank, 12 I, in engine compartment) Engine 642 in model 906. 6/7 with code MH3 (Low- pollutant engine EPA 13 / CARB) and except code KP2 (AdBlue tank, 12 I, in engine compartment)	Remedy
AR14.40-D-2041S	Check AdBlue concentration	Model 906	Remedy
SI14.40-S-0014A	Service Information bulletin: Filling AdBlue tank		Remedy
AR00.19-P-0100-09A	Repair wiring harness using solder connectors		Remedy

Validity		
Vehicle	Engine	Transmission

Sprinter III	642	*
Sprinter III	651	*

Attachments

01.jpg:



03.jpg:

