

## Engine power output is reduced, engine diagnosis indicator lamp lights up, fault codes P15FF00 and P245411

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Topic number	LI07.08-N-065219
Version	2
Design group	07.08 Governor
Date	07-20-2017
Validity	MODEL 906 with OM642 (from 906.### N574794) MODEL 906 with OM642 (to 906.### N605428) MODEL 906 with OM642 (from 906.### S874134) MODEL 906 with OM642 (to 906.### S977452)
Reason for change	Added Step 7 and pictures 8 & 9
Reason for block	

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### Complaint:

Engine power output is reduced, engine diagnosis indicator lamp lights up, fault codes P15FF00 and P245411

### Cause:

Possible engine control unit connection (CR60NFZ and CR60NFZ\_Euro VI).

### Remedy:

Important: Do not replace engine control unit, differential pressure sensor and engine wiring harness!

Are fault codes P15FF00, P245411 stored in the engine control unit (CR60NFZ):

1. Run initial quick test.
2. Visual inspection: line condition in area of differential pressure sensor (sensor up to diesel particulate filter) as well as check of electrical connections and wiring up to branch-off line for engine wiring harness.
3. If all visual checks are normal for the components mentioned in test step 2, please remove the engine control unit (see AR07.08-D-7006SD).
4. Clean contact pins on engine control unit as per operation steps 4.1 to 4.4

4.1 A total of 154 contact pins have to be cleaned on the engine control unit (see 1.jpg).

Important: One cleaning contact is sufficient to clean all the contact pins in a color-marked area (see 2.jpg and 3.jpg).

4.2. Apply cleaning fluid to cleaning contact. Avoid forming droplets! It need only be applied once to clean the specified number of pins per cleaning contact (see 4.jpg).

Warning: Please observe the applicable operating instructions and safety information for this product when handling cleaning fluid.

4.3 The cleaning contact is used for 2 contacts at the same time on the small contact pins. Clean pins by moving up and down 2 times in succession. Slide cleaning contact onto pins until the cleaning contact impacts with the multipoint connector housing (see 5.jpg, 6.jpg and 7.jpg).

Warning: If the cleaning contact is tilted, adjacent contacts may be damaged or bent.

# XENTRY TIPS

**Important:** Cleaning fluid volatilizes immediately after the cleaning process. This means that installation of the cable sets for the engine control unit can be commenced immediately after the cleaning process.

4.4 Install engine control unit (see AR07.08-D-7006SD).

**Warning:** Care should be taken prior to installation to ensure that the contacts do not exhibit any signs of deformation. Deformation may lead to contact problems in the engine control unit that then render the engine control unit unusable!

5. For Ambulance vehicles ONLY, replace the engine wiring harness and clean the pins of the CDI control module.
6. Erase fault memory.
7. Fasten differential pressure sensor plug under engine control unit to vehicle wiring harness using cable tie across center of plug housing (see Pic 8.jpg and Pic 9.jpg.).

If this is a repeat repair:

1. Run initial quick test.
2. Create a PTS case and attach the following documents:
  - Quick test 1: First workshop visit # Clean contact pins on engine control unit
  - Quick test 2: Current quick test with fault freeze frame data

Attachments	
File	Description
1.jpg	View of contact pins on control unit
2.jpg	View of color marked areas
3.jpg	View of color marked areas
4.jpg	Apply cleaning fluid to cleaning contact, Avoid dropping any fluid onto the felt!
5.jpg	Slide cleaning contact onto pins
6.jpg	Slide cleaning contact onto pins
7.jpg	Slide cleaning contact onto pins
Pic 8.JPG	Differential pressure sensor plug not fastened
Pic 9.JPG	Differential pressure sensor plug fastened

Symptoms
Power generation / Engine management / Indicator lamp / Engine diagnosis / lit
Power generation / Engine management / Engine performance / Goes into limp-home mode

Control unit/fault code		
Control unit	Fault code	Fault text
CDI60Common Rail Diesel Injection (CR60NFZ)	P15FF00	The signal line of component 'B28/20 (Diesel particulate filter differential pressure sensor)' has a short circuit to ground. (MOPF)
N3/35 - Motor electronics 'CDI60' for combustion engine 'OM642' (CDI) (CR60NFZ_EU-RO6)	P245411	The input for differential pressure sensor 1 in the diesel particulate filter has a short circuit to ground. There is a short circuit to ground.

# XENTRY TIPS

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 000 540 38 04			Cleaning contact	1	For cleaning contact pins (Bag contains 15 pcs)	X
A 008 989 55 71			Cleaning fluid set	1	For cleaning contact pins. <b>IMPORTANT:</b> Please observe operating instructions and safety information for fluid set	X
A 642 150 11 01			Engine wiring harness	1	As needed for (Ambulance vehicles only)	X
A 642 150 12 01			Engine wiring harness	1	As needed for (Ambulance vehicles only)	X

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
54-1011	PERFORM QUICK TEST		5900D 01	
07-1647	CLEAN PINS ON ENGINE MANAGEMENT CONTROL UNIT (AFTER QUICK TEST)		5900D 01	
49-0000	VISUAL INSPECTION		5900D 01	

WIS-References			
Document number	Title	Note	Allocation
PE07.16-D-2101-VVA	Wiring diagram of common rail diesel injection control unit, CR60 commercial vehicle		Remedy
AR07.08-D-7006SD	Remove/install diesel injection system control unit	Engine 642 Model 906	Remedy
WS54.00-Z-9999AZ	Special tool for car electrical system	Overview of wiring harness repair kit	Remedy

## Attachments

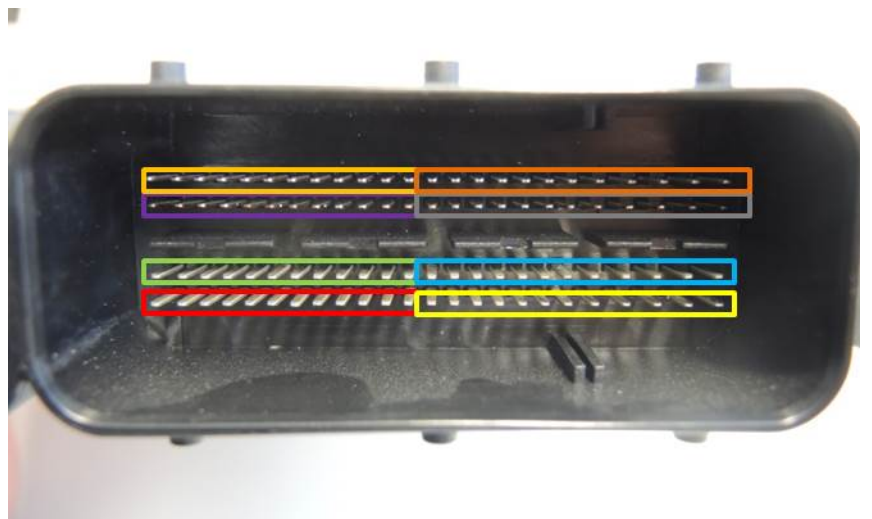
1.jpg:



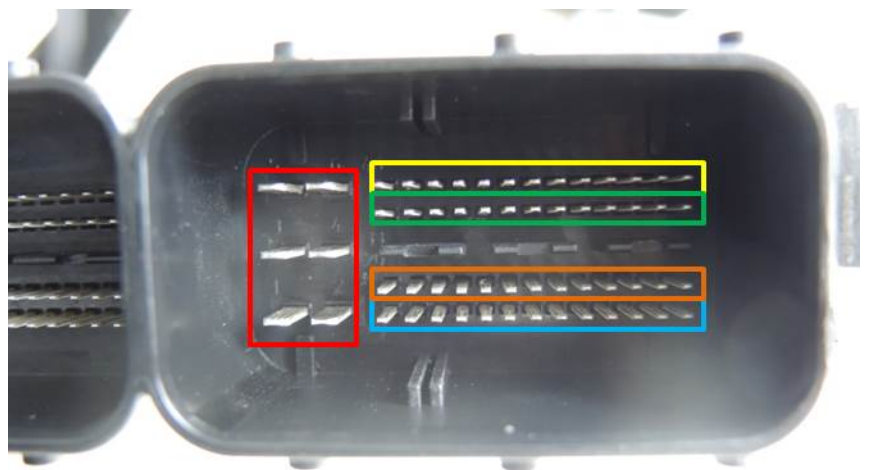
# XENTRY TIPS

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2.jpg:



3.jpg:



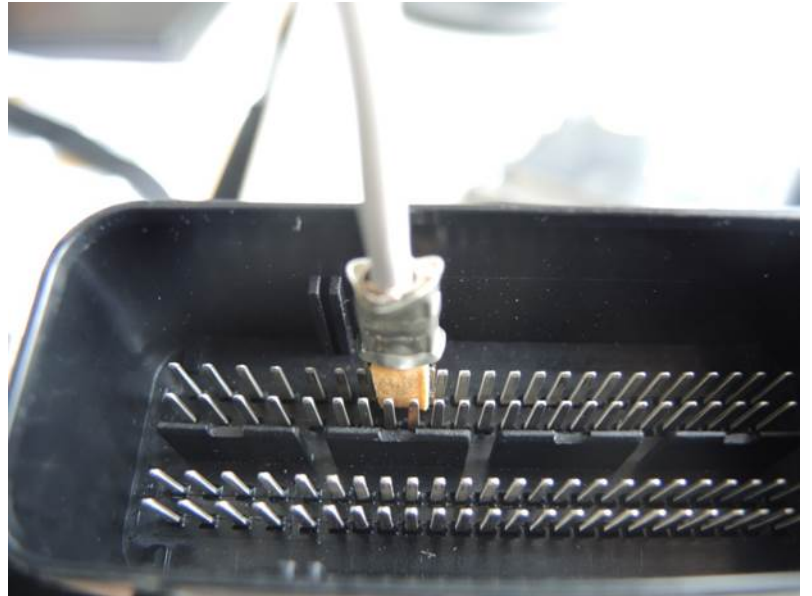
4.jpg:



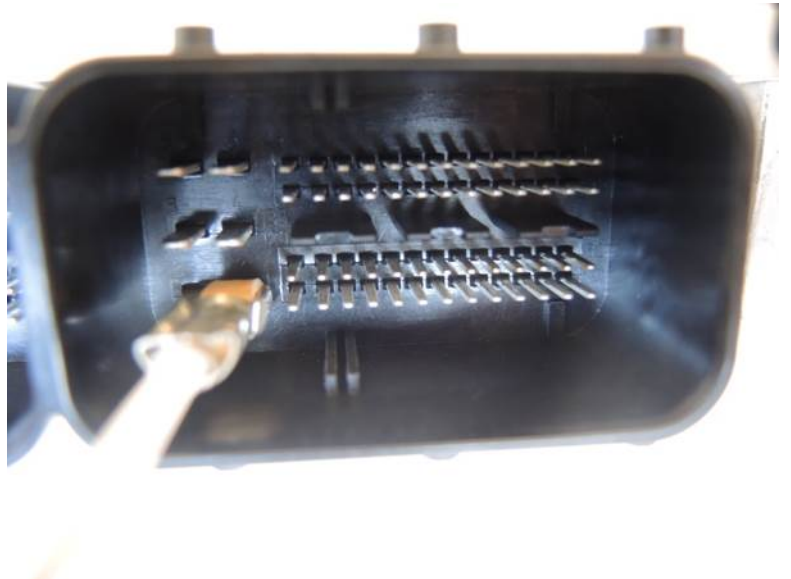
# XENTRY TIPS

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5.jpg:



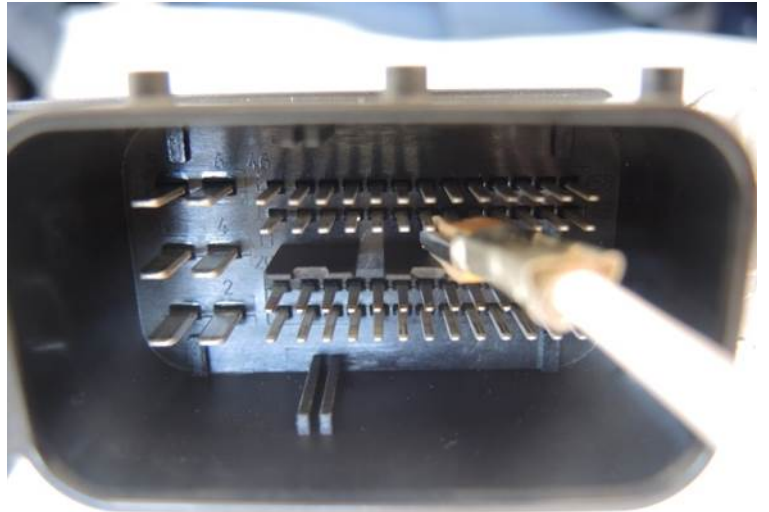
6.jpg:



# XENTRY TIPS

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7.jpg:



Pic 8.JPG:





# XENTRY TIPS

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Pic 9.JPG:

