

## DAIMLERCHRYSLER

DaimlerChrysler India Private Limited

Pune, November 26, 2004

All Workshop Incharge DC India dealerships / ASC,

Supplement to Service Measure dated 12<sup>-</sup> October 2004 (Accounting No. 07 930 06) Check injectors and ZME; replace, if necessary.

Model 211 with engine OM 646, 647, 648

Dear All,

Further to the subject Service Measure, we are in receipt of a revised work instructions from DCAG. The same is enclosed for your information.

Kindly refer only the revised work instructions for carrying out the subject Service Measure.

Please acknowledge receipt of this letter and feel free to revert to us for any queries.

Thanking you

With best regards, DaimlerChrysler India Private Limited

D. Chandavarkar General Manager

Ashish Salvi Divisional Manager Field Service

Copy to - DCIPL Service Representatives ) for close follow up with the workshops

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Encl. - Revised work instructions

Board of Management : Dr. Kiaus-Peter Arnold, Piyush Arora, Hans-Michael Huber (Speaker), Suhas Kadlaskar, Rolf Löffler, Augustus Mallier, Sanjiv Sahajwala

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## Code: 0404P07A44

## Work description

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Check injector (leakage + quantity correction value (MAR)) and quantity control valve (metering unit – ZME), replace if necessary.

Model 211 with engine OM 646, 647, 648 without SA code 450, 970 or 965

## Scope of testing

# DAS check with DRV actuation module (see: WS 15.00 -P- 0044B) Note:

Only the necessary testing scopes are displayed for each vehicle: Preventive testing of the common rail diesel injection system requires that the engine coolant be at a temperature of at least 80°C.

## Injector "Leakage + quantity correction value + quantity control value (metering unit - ZME)" Vehicles up to production date 01.03

 Pressure drop test with DRV actuation module (up to production 01.03 (leakage)), without opening the injection system, If test concludes OK (assessed by DAS), i.e. no leakage detectable, DAS goes directly to the quantity correction value test (item 2).

If test concludes not OK, the "Leakage check via the small tube method" follows (according to documentation in DAS test step) in order to precisely localize leakage. If the leakage quantity from one or more injectors exceeds the limit value, all injectors must be replaced at the end of the entire testing procedure (as per AR07.16-P-1000T); the results of both tests must be documented (DAS printout) and included with the injectors, which must be returned. (The installation position need not be indicated.)

In this case, the test "Quantity correction value" (item 2) is **not necessary**. Testing of the **quantity control valve (metering unit - ZME) will follow directly (item 3)**.

### **Important Notice:**

Following test step 1 (pressure drop test), the adapter cable of the DRV module MUST be disconnected and the engine wiring harness plug reconnected to the DRV. Ensure that this is done before continuing with the remaining test steps.

#### 2. Quantity correction value

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If one or more injectors exceeds the specified limit value, only those injectors that have exceeded this value need to be replaced (as per AR 07.16-P-1000T).

The results must be documented accordingly (DAS printout) and included with the injectors, which must be returned.

 Quantity control valve (metering unit - ZME) If the specified limit value is exceeded, the test of the "Quantity control valve (ZME test)" must be documented accordingly (DAS printout) and the ZME replaced (as per AR07.03-P0003B).

### Injector "Quantity correction value + quantity control valve (metering unit - ZME)" Vehicles as of production date 02.03 to 04.03

Quantity correction value
 If one or more injectors exceeds the specified limit value, only those injectors that have exceeded this
 value need to be replaced (as per AR07.16-P-1000T).
 The results must be documented accordingly (DAS printout) and included with the injectors, which must
 be returned.



 Quantity control valve (metering unit - ZME) If the specified limit value is exceeded, the test of the "Quantity control valve (ZME test)" must be documented accordingly (DAS printout) and the quantity control valve replaced (as per AR07.03-P0003B).

#### Quantity control valve (metering unit - ZME) Vehicles as of production date 05.03 to 11.03

If the specified limit value is exceeded, the test of the "Quantity control valve (ZME test)" must be documented accordingly (DAS printout) and the ZME replaced (as per AR07.03-P0003B).

#### Procedure

- 1. Remove engine covers.
- 2. Connect DAS.
- Navigate to Control units => Drive =>CDI3 Common Rail Diesel Injection3 => and then <u>"CDI injection</u> system preventative measures" and carry out tests.
- 4. Connect DRV actuation module.
- 5. Carry out testing procedure "CDI injection system preventive measures".

Questionable components may only be replaced after all of the tests mentioned here have been carried out and completely documented.

### **Special tools**

Quantity	Designation	Part no.	
1	DRV module	W 611 589 05 2100	
1	Adapter cable 2-pin	W 611 589 07 6300	

## Parts

Quantity	Designatio	<u>n</u>	Part no.	
As req.	Injector	OM646 up to engine 30045955 OM647 up to engine 30041540	A 611 070 11 87 05 A 611 070 11 87 05	
As req.	Injector	OM646 as of engine 30045956 OM647 as of engine 30041541 OM648	<ul> <li>A 648 070 01 87 05</li> <li>A 648 070 01 87 05</li> <li>A 648 070 01 87 05</li> </ul>	
As req.	ZME	OM646, 647, 648	A 646 074 00 84 05	

As req. = As required according to inspection findings

Removed injectors and quantity control valves (metering units) must be returned via the usual used parts return channel.

Please cite the following on the return slip :

Accounting number: 07 930 06 and Code: 0404P07A44.

## Operation text and flat rates

• ····	Operation taxt	Flat rate	Accounting no.		
Operation no.					
02-4367	Carry out diagnosis of injector , quantity corr	rection value and	07 030 06		
02	metering unit (after quick test)	0,5 h	07 930 00		
on task Carpy out diagnosis of quantity correction value and					
02-4300	metering unit (after quick test)	0,4 h	07 930 06		
	-				
00 4260	Correcout diagoosis of metering unit				
02-4369	(after quick test)	0,4 h	07 930 06		
	(				
	e and amelitation more trament		. N		
02-4371	(after diagnosis)	0,4 h	07 930 06		
	(anel diagnosis)		07 020 06		
02-4372	Replace (1) injector (after diagnosis)	0,5 h	07 930 00		
	OM 646/ 647/ 648				
02 4514	Replace (2) injectors (after diagnosis)	0,6 h	07 930 06		
02-4014	OM 646/ 647/ 648				
		0.8.6	07 930 06		
02-4515	Replace (3) injectors (after diagnosis)	0,0 11			
	OM 646/ 647/ 646				
02-4516	Replace (4) injectors (after diagnosis)	1,1 h	07 930 06		
	OM 6477 648				
02 4517	Peplace (5) injectors (after diagnosis)	1,3 h	07 930 06		
02-4517	OM 648				
02-4373	Replace (all) injectors (after diagnosis)	11h	07 930 06		
	OM 646	1.3 h	07 930 06		
	OM 648	1,5 h	07 930 06		
	· · · · · ·	0.4 h	07 020 06		
02-4374	Replace metering unit (after diagnosis)	0,4 n	07 930 00		

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