

Service Campaign Bulletin

Campaign No. 2013010001, February 2013

TO: ALL MERCEDES-BENZ CENTERS

SUBJECT: **Model 207, 212, 218, 221, 231 with Engine M278, Model Year 2013**
Remove Check Valve for Left and Right Secondary Chain Tensioners

This Service Campaign has been initiated because Daimler AG (DAG) has determined that the check valve of the left and right secondary chain tensioners installed at the factory may have been pressed too deep into the cylinder heads. As a result oil supply into the cylinder head cannot be ensured. An authorized Mercedes-Benz dealer will remove the check valve of the left and right side secondary chain tensioners at the next workshop service.

Prior to performing this Service Campaign:

- Please check VMI to determine if the vehicle is involved in the Campaign and if it has been previously repaired.
- Please review the entire Service Campaign bulletin and follow the repair procedure exactly as described.

Please note that Recall and Service Campaigns **do not expire** and may also be performed on a vehicle with a vehicle status indicator.

Approximately 167 vehicles are affected.

Order No. P-SC- 2013010001

This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Records.

Procedure

A. Remove Left and Right Secondary Chain Tensioner

Note:

Do not remove chain tensioners at the same time. After removal of the first chain tensioner, remove the corresponding check valve, reinstall the chain tensioner and continue with the second chain tensioner.

Note: (regarding below WIS instructions)

- Drain coolant at radiator only, do not drain coolant from engine block.
 - Using a Torx 40 bit X 72 mm (locally sourced tool, see special tools section) will allow for easier access to lower oil filter housing bolts.
1. For models 207, 212, 218 refer to WIS: AR05.10-P-7800ELB.
 2. For models 216, 221 refer to WIS: AR05.10-P-7800MMB.
 3. For model 231 refer to WIS: AR05.10-P-7800RKB and additional information below:



Refer to safety precautions located in WIS: AS20.00-Z-0001-01A, AS00.00-Z-0010-01A, AH20.00-N-2080-01A.

- Remove/install charge air ducts (refer to attached WIS document on page 6).
- Remove lower engine compartment panels, refer to WIS: AR61.020-P-1105RK.
- Drain coolant from radiator (arrow, Figure 1).

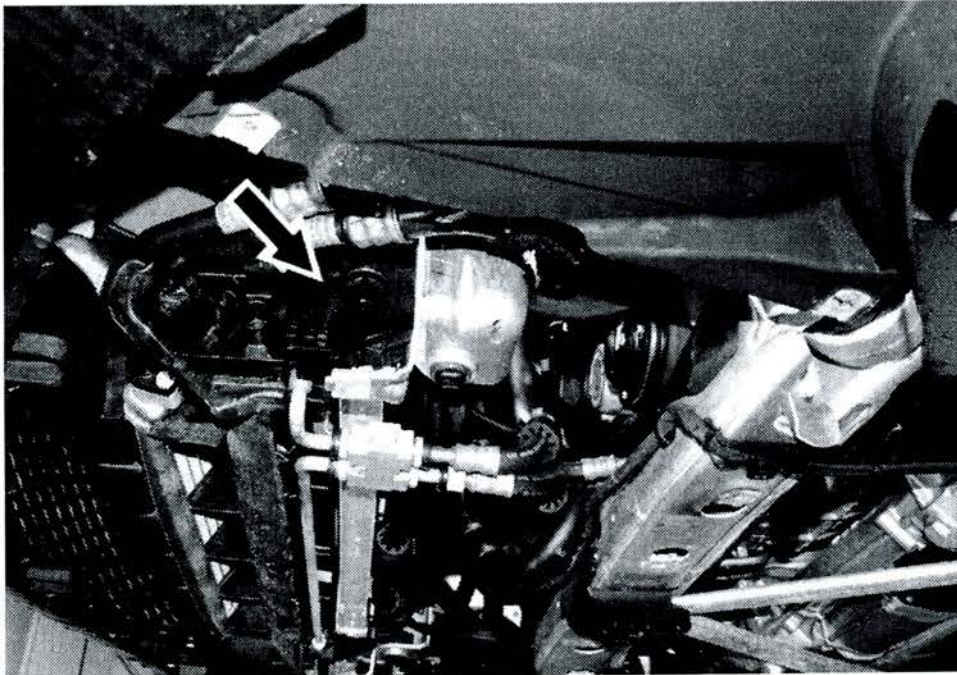


















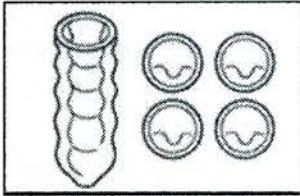
Figure 1 (model 231)

- Refill cooling system and bleed (after performing subject B), refer WIS: AR20.00-P-1142-04A
- Check cooling system for leaks (after performing subject B), refer to WIS document on page 9.

4	Release clamp for upper charge air duct on the left (1l) or for upper charge air duct on the right (1r) on boot air filter housing (4)	 The boot remains on the air filter housing (4).	
5	Release clamp for upper charge air duct on the left (1l) or for upper charge air duct on the right (1r) on turbocharger	 The boot remains on the upper charge air duct on the left (1l) or for upper charge air duct on the right (1r).	
6	Unscrew screw/bolt (8) upper charge air duct on the left (1l) or for upper charge air duct on the right (1r) on cylinder head cover	 Bolt, charge air manifold to front cover/oil filter housing/cylinder head/cylinder head cover	BA09.40-P-1008-01R
7	Remove upper charge air duct on the left (1l) or upper charge air duct on the right (1r)	 Seal openings on air intake pipe (6) and turbocharger.  Set of protective caps	001 589 02 91 00
8	Remove air filter housing (4)		
9	Release clamp for upper charge air duct on the left (2l) or for upper charge air duct on the right (2r) on charge air cooler (6)	 The boot remains on the charge air cooler (6).	
10	Release clamp for boot for lower charge air duct on the left (2l) or for lower charge air duct on the right (2r) on turbocharger	 The boot remains on the turbocharger.	
11	Remove bolts for right lower charge air duct (2r) from cylinder head	 When removing the right lower charge air duct (2r)	
12	Remove screw/bolts for lower charge air duct on the left (2l) from cylinder head and oil filter housing	 When removing the lower charge air duct on the left (2l)  Bolt, charge air manifold to front cover/oil filter housing/cylinder head/cylinder head cover	BA09.40-P-1008-01R
13	Remove lower charge air duct on the left (2l) or lower charge air duct on the right (2r)	 Seal openings on air intake pipe (6) and turbocharger.  Set of protective caps	001 589 02 91 00
	Check		
14	Check boots, rubber seal and clamp for damage	 Replace if necessary.	
15	Install in the reverse order		
	Check		
 Danger!	Risk of accident from vehicle starting off by itself when engine running. Risk of injury (bruises and burns) resulting from working on the engine while it is being started or when it is running.	Secure vehicle to prevent it from starting off by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	AS00.00-Z-0005-01A
16	Carry out engine test run, checking the engine for proper operation and leaks		

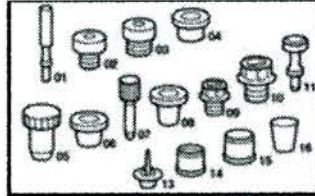
Nm Turbocharger

Number	Designation	ENGINE 157	ENGINE 278
BA09.40-P-1008-01R	Bolt, charge air manifold to front cover/oil filter housing/cylinder head/ cylinder head cover Nm	9	9














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
Set of protective caps



129 589 00 91 00

Record plug

2	Adjust heater to maximum heat output		
3	Unscrew cap (1) from coolant expansion reservoir (2)	 Unscrew cap (1) slowly and relieve overpressure.	
4	Check coolant level and antifreeze content coolant	 If antifreeze content of coolant is too small, either antifreeze protection must be added or the coolant must be replaced.	
	Notes on coolant		AH20.00-N-2080-01A
5	Screw on test cap (3) at coolant expansion reservoir (2)	 Test cap	210 589 00 91 00
6	Connect pressure pump (4) at tester cap (3)	 Pressure pump	124 589 24 21 00
		 Test cap	210 589 00 91 00
7	Apply test pressure to cooling system	 The specified test pressure must not be exceeded. To avoid any damage to the cooling system.	BE20.30-P-1005-01A
	Checking		
8	Check condition and seating of the Henn coupling.	 Replace catch springs if necessary.	AR09.41-P-1311-01AL
9	Perform visual inspection on coolant carrying components	 Check condition and coolant loss for all coolant carrying components and connections. The coolant carrying components should be checked for inner leaktightness if there is no external coolant loss. There is the possibility, for example, that coolant can find its way over a defective cylinder head gasket into the combustion chamber or over a defective water heat exchanger into the oil circuits.	
	Install		

10	Relieve test pressure in cooling system	 To do this actuate pressure relief button on the  pressure pump (4)	
		 Pressure pump	124 589 24 21 00
11	Remove pressure pump (4) from tester cap (3)		
12	Unscrew tester cap (3) from coolant expansion reservoir (2)		
13	Switch off ignition		
14	Check coolant level and antifreeze content coolant	 Mixture ratio for coolant	BF20.00-P-1001-04A
	Notes on coolant		AH20.00-N-2080-01A
	Notes on coolant level		AH20.00-P-1142-01V
15	Screw cap (1) onto coolant expansion reservoir (2)		

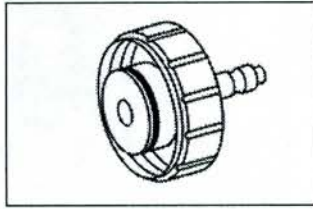
Cap for radiator or expansion reservoir

Number	Designation	2-stage cap
BE20.30-P-1005-01A	Test pressure for pressure-testing cooling system	bar gage 1.4

Mixture ratio for coolant

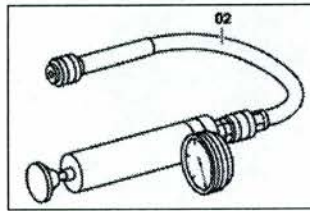
Number	Designation	Engine all
BF20.00-P-1001-04A	Mixture ratio for coolant	Antifreeze/water up to -37°C 50/50
		up to -45°C 55/45
	Specifications for service products	Sheet BB00.40-P-0310-01A

			Sheet	BB00.40-P-0325-00A
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210 589 00 91 00

Test cap



124 589 24 21 00

Pressure pump