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ENGINE DIAGNOSIS WARNING LAMP LIGHTS UP, FAULT CODES 1200 AND 1208 STORED IN MOTOR ELECTRONICS CONTROL UNIT

TECHNICAL SERVICE BULLETIN

Reference Number(s): LI03.30-P-050027 Version 2, Date of Issue: May 31, 2011

Mercedes- 272 in model 164, 171, 203, 209, 211, 219, 221, 230, 251; Engine 273 in
Benz: model 164, 209, 211, 216, 219, 221, 230

: Implementation of series measure changing material for balance shaft
sprocket as of engine 2729xx30 468993 as of October 2006 production

: Implementation of series measure changing material for timing chain
guide wheel as of engine 2739xx30 088611 as of September 2006
production

Design Group: 03.30 Flywheel, driving disk, vibration damper, starter ring gear

Reason For Change: Reason for change Supersedes DTB S-B-03.30/08

Superseded Bulletin(s): S-B-03.30/08J, Date of Issue: June 17, 2009, S-B-
03.30/08I, Date of Issue: April 29, 2009

COMPLAINT

Engine diagnosis warning lamp lights up, fault codes 1200 and 1208 stored in motor electronics control unit.

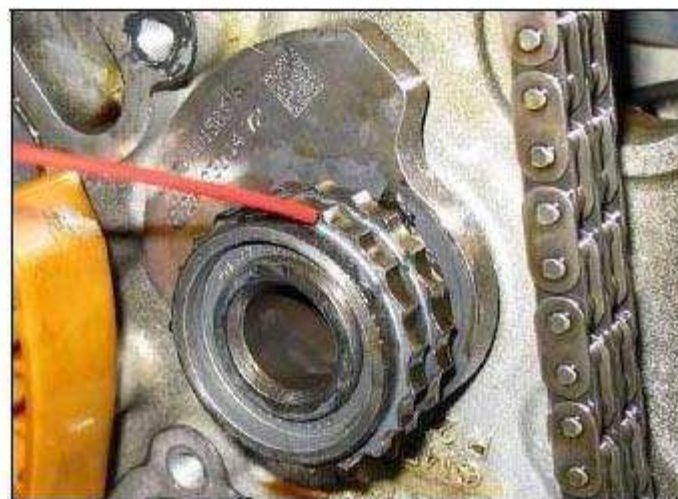
NOTE: The fault codes are recorded as current and stored in the fault memory. When the fault memory is erased and then the engine is restarted, the fault codes reoccur immediately.

CAUSE

Balance shaft sprocket (engine 272) or timing chain guide wheel (engine 273) worn (sprocket damage profile).

NOTE: The position of the camshafts of the right cylinder bank relative to the crankshaft is impaired by a worn sprocket on the balance shaft (engine 272) or by a worn guide wheel for the timing chain (engine 273).

ATTACHMENTS



S-B-03.30/08a

Fig. 1: Damage Profile Of Sprocket



Insert borescope over the right-hand chain side rail as far as the balance shaft / guide wheel

G00423456

Fig. 2: Check For Wear With Borescope

(Insert borescope over the right-hand chain slide rail as far as the balance shaft / guide wheel)

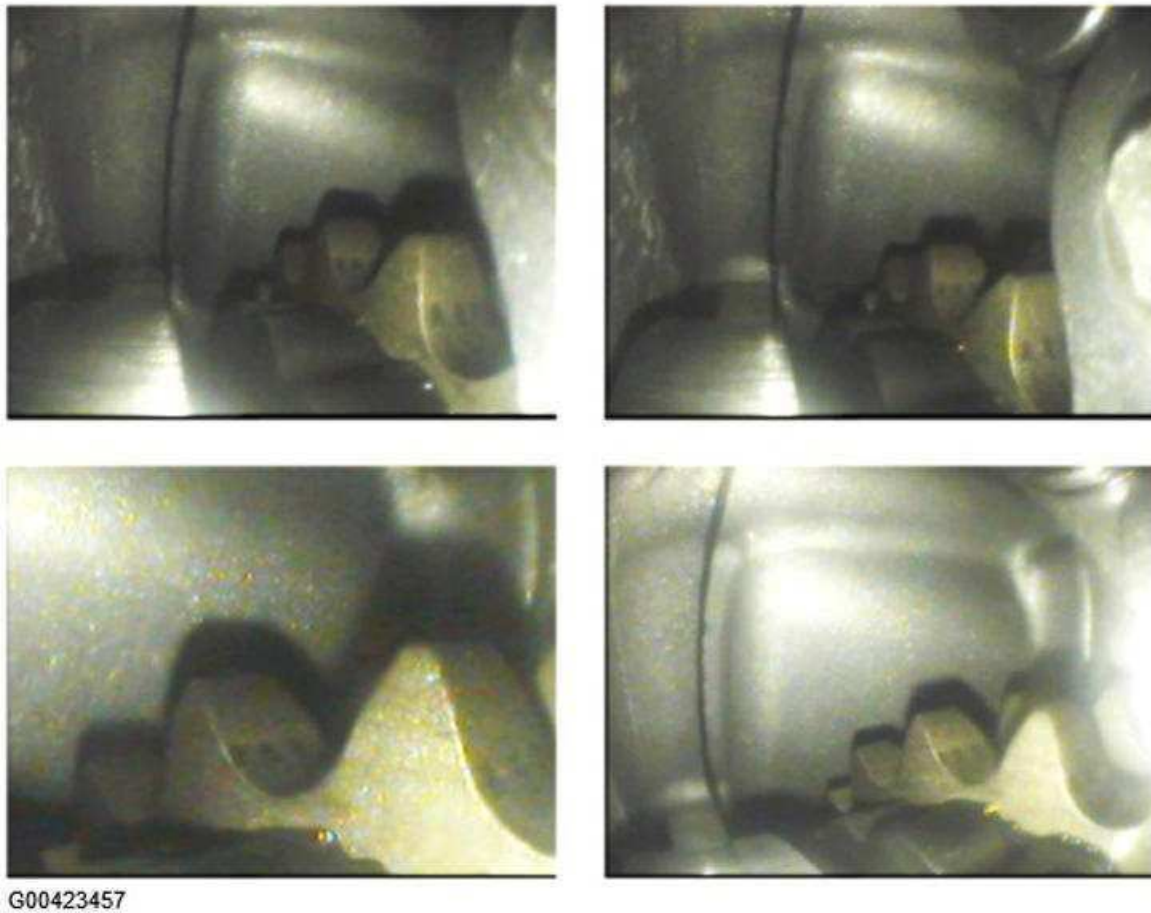


Fig. 3: Example Images Of Balance Shaft Sprocket (Sprocket OK)

REMEDY

1. Remove right front camshaft adjuster cover.
2. Check balance shaft sprocket (engine 272) or timing chain guide wheel (engine 273) for wear using flexible borescope (see attachment sprocket damage profile/ borescope "endoscope" image of sprocket).
3. If worn as in the sprocket damage profile: Continue with step 4.

If there is no sprocket wear, create a DTS case and contact DTS support.

Engine repair

4. Replace balance shaft (engine 272) or timing chain guide wheel (engine 273)
5. Install a new chain tensioner (only renew chain tensioner A272 050 01 11 when required).
6. Engine oil and filter change. (Only use engine oils as per Specification 229.1 and 229.3 - use the cheapest engine oil available in the workshop)

7. Drive with engine at high load and rpm for a distance of at least 20 km.

After repair

8. Engine oil and filter change.
9. Replace camshaft adjustment solenoids.

NOTE: The flexible borescope (endoscopes) can be found also at:

href="http://gotis.aftersales.mercedes-benz.com">http://gotis.aftersales.mercedes-benz.com
Workshop equipment database : A-01-02.1

NOTE: This LI takes precedents on the topics presented and supersedes the previously published DTB S-B-03.30/08.

Please refer to other information provided in WIS or in the STAR TekInfo.

SYMPTOMS

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Power generation / Engine diagnosis / Engine management / Lights up / Engine management indicator lamp /

CONTROL UNIT/FAULT CODE

CONTROL UNIT/FAULT CODE

Control unit	Fault code	Fault text
ME 9.7-Motor electronics 9.7 (ME97)	1200	Constant adjustment of exhaust camshaft of right cylinder bank in direction 'Retarded'(P0017)
ME 9.7-Motor electronics 9.7 (ME97)	1208	Constant adjustment of intake camshaft of right cylinder bank in direction 'Retarded'(P0016)

PARTS

PARTS

Part number	Designation	Qty	Note	EPC	Non-EPC
A2720300413		1		X	Â

Part number	Designation	Qty	Note	EPC	Non-EPC
	Guide wheel repair kit		REPAIR KIT FOR GUIDE WHEEL M272 2.5L		
A2720300513	Guide wheel repair kit	1	REPAIR KIT FOR GUIDE WHEEL M272 3.0L	X	Â
A2720300613	Guide wheel repair kit	1	REPAIR KIT FOR GUIDE WHEEL M272 3.5L	X	Â
A2720300713	Guide wheel repair kit	1	REPAIR KIT FOR GUIDE WHEEL M273	X	Â

WIS-REFERENCES

WIS-REFERENCES

Document number	Title	Note	Allocation
AR03.20-P-1000CV	Remove/install balance shaft	Engine 272 in models 204, 207	Remedy
AR03.20-P-1000GZA	Remove/install balance shaft	Engine 272 (except 272.973) in models 164, 251	Remedy
AR03.20-P-1000QB	Remove/install balance shaft	Engine 272 in models 203, 209	Remedy
AR03.20-P-1000RX	Remove/install balance shaft	Engine 272 in model 230	Remedy
AR03.20-P-1000SX	Remove/install balance shaft	Engine 272 in model 221	Remedy
AR03.20-P-1000TS	Remove/install balance shaft	Engine 272 in models 211, 219	Remedy
AR03.20-P-1000VA	Remove/install balance shaft	Engine 272 in model 171	Remedy
AR05.10-P-7760A	Remove/install timing chain guide wheel	Engine 273	Remedy

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