

Engine: All Technical Service Bulletins**Engine Controls - MIL ON/Codes FC 1200/FC 1208 Set**

Date: August 23, 2007

Order No.: T-B-03.30/09

Supercedes:

Group: 03

SUBJECT:

Model 164.186/871

Model 251.165

Equipped with M272 Engine Up to Serial No. 2729..30 468993 or M273 Engine Up to Serial No. 2739..30 088611

Check Engine Light On / Fault Codes FC1200 / FC1208 Stored in ME-SFI Control Unit

If you receive customer reports of the check engine light being illuminated and the following fault code scenario is found in the above model vehicles, perform the remedy below to resolve.

Fault Code Scenario:

DTCs FC1200 and FC1208 are stored in ME-SFI control unit. 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. This is due to the positioning of the camshafts of the right cylinder bank relative to the crankshaft being impaired by a worn sprocket on the balance shaft (M272) or by a worn guide gear for the timing chain (M273).

Remedy:

1. Perform a visual inspection for wear of teeth on sprocket of balance shaft (M272) or of guide gear for timing chain (M273) by removing the timing case cover on the engine.

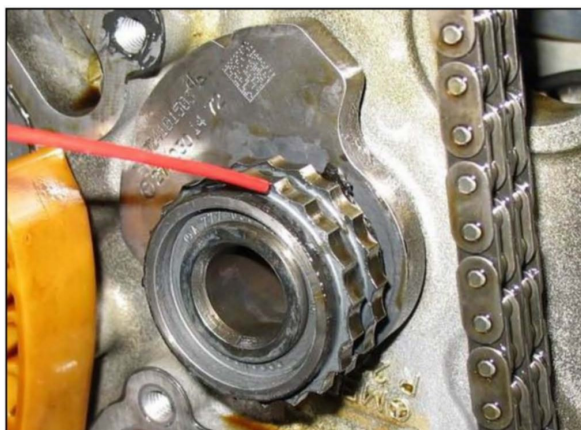


Figure 1

Note:

When inspecting the component, refer to Figure 1 for an example of a damaged gear.

2. To repair the engine, replaced the balance shaft (M272) or replace the guide gear of chain drive (M273).
3. Replace the engine oil pump.
4. Replace the chain tensioner.
5. Change engine oil and filter.
6. Drive with engine at high load and rpm for approx. 15 miles.
7. After completing step 6, change engine oil and filter once more.

8. Replace the camshaft adjustment solenoids.

Qty.	Part Name	Part Number
1	Shaft	A272 030 26 72
1	Shaft	A272 030 27 72
1	Shaft	A272 030 28 72
1	Intermediate gear	A273 050 06 05

Parts Information

Note:

The following allowable labor operations should be used when submitting a warranty claim for this repair. This information has been generated on August 23, 2007. Please refer to Netstar -> Star TekInfo -> Star Time for the most current labor time allowance.

Operation: Timing chain cover, R&R / seal (01-8000)
 Engine compartment panel, bottom – front & rear part, R&R (61-1070)
 Front engine compartment paneling remove/install vehicle with offroad package (61-1101)
 Engine compartment trim at bottom removed/install (61-1105)
 Engine with auto. trans., R&R (01-2800)
 Engine balancing shaft R&R/replace as required (03-0000)
 Camshaft(s) timing adjuster – all, R&R / replace (valve covers removed) (05-7211)

Timing chain idler sprocket, replace (timing chain cover removed) (05-0000)
 Engine oil pump - (main/lower oil pan removed), R&R / replace (18-6022)
 Solenoid units – (all) var. valve time-cam control mech, replace (05-7290)
 Oil change, perform (00-6555)
 Road test (00-9151)

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
03043 D1	01 8000	10.4 hrs.	Z1
		10.7 hrs.	BA
		12.8 hrs.	EA
	61 1070	0.3 hrs.	BA
	61 1105	0.3 hrs.	Z1
	61 1101	0.5 hrs.	EA
If necessary	01 2800	7.3 hrs.	Z1
		7.4 hrs.	BA

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
	03 0000	1.4 hrs.	B4, Z1
	05 0000	0.1 hrs.	EA
	18 6022	0.3 hrs.	BA, Z1
		0.5 hrs.	EA
	05 7290	1.8 hrs.	EA
	05 7211	1.6 hrs.	BA, Z1
	00 6555	0.5 hrs.	BA, EA, Z1
	00 9151	0.3 hrs.	BA, EA, Z1

In Case of Warranty, use the table.