
Oil leakage in M156/M159

Topic number	LI01.40-P-051897
Version	1
Design group	01.40 Crankcase, timing case cover, end cover
Date	05-23-2011
Validity	M156/M159
Reason for change	Sealant part number corrected
Reason for block	

Complaint:

1. Leaking in area of crankshaft Simmerring seal (Rear main seal - Simmerring seal folded back)
2. Leaking in area of honeycomb structure
3. Leaking in area of pressure oil duct
4. Leaking in area of timing case cover in M159

Cause:

1. Crankshaft sealing ring
2. Crankcase bedplate porous
3. Core hole bolt of pressure oil duct leaking
4. Porosity in vicinity of oil drain screw on timing case cover of M159

Attachments	
File	Designation
3.jpg	Crankcase pressure oil duct bolt
4.jpg	Crankcase bedplate leaking
5.JPG	Timing case cover oil plug
1.jpg	Ventilation bore 1
2.jpg	Ventilation bore 2

Remedy:

- Re. 1. Carefully remove crankshaft Simmerring seal and check ventilation bore for free passage (see attachment)
- Re. 2. Clean crankcase, spray with talcum powder and check seal. Replace crankcase if necessary.
- Re. 3. Unscrew bolt; the thread may be slightly damaged. Install steel bolt and tighten to tightening torque of 45 Nm +/- 4 Nm.

If still leaking, replace crankcase.

- Re. 4. Open the DTS online case and contact DTS to process the case further. All relevant information including illustrations of the affected oil leak area must be attached to the case.

Symptoms

Power generation / Engine lubrication/oil cooling leaks / External oil loss / Engine lubrication/oil cooling /

Parts

XENTRY

Part number	xsl-Par-tEs1	xsl-Par-tEs2	Designation	Quantity	Note	EPC	Non-EPC
A 112 997 02 46			Rear crankshaft sealing ring	1	Order as per EPC MB special tool no. 111 589 08 43 00	X	
A 210 997 01 32			Pressure oil duct steel bolt	1	Tightening torque 45 Nm +/- 4 Nm	X	
A 001 989 89 20	10		Sealant	1		X	
N 007603 024105			Sealing ring	1		X	

WIS-References			
Document number	Title	Note	Allocation
AR03.20-P-3063TMG	Replace rear crankshaft radial sealing ring	Re. remedy 1	Remedy

Validity		
Vehicle	Engine	Transmission
*	156	*
*	159	*
*	159.980	*

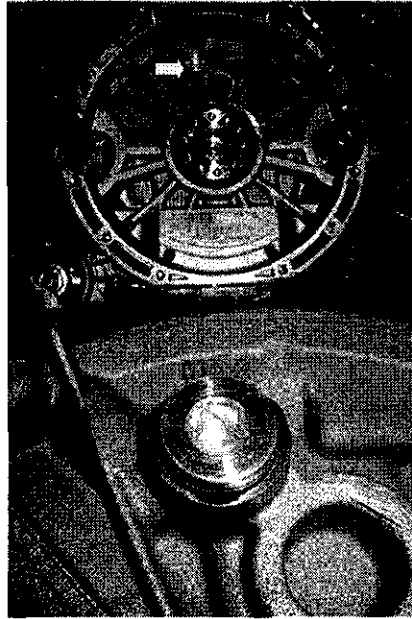
Full model designation breakdown		
Vehicle	Engine	Transmission
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164.177	156.980	722.930
197.377	159.980	700.400
204.077	156.985	722.907
204.077	156.985	722.930
204.277	156.985	722.907
204.277	156.985	722.930
209.377	156.982	722.907
209.477	156.982	722.907
211.077	156.983	722.907
211.277	156.983	722.907
212.077	156.985	722.930
212.277	156.985	722.930
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219.377	156.983	722.907
219.377	156.983	722.930

XENTRY

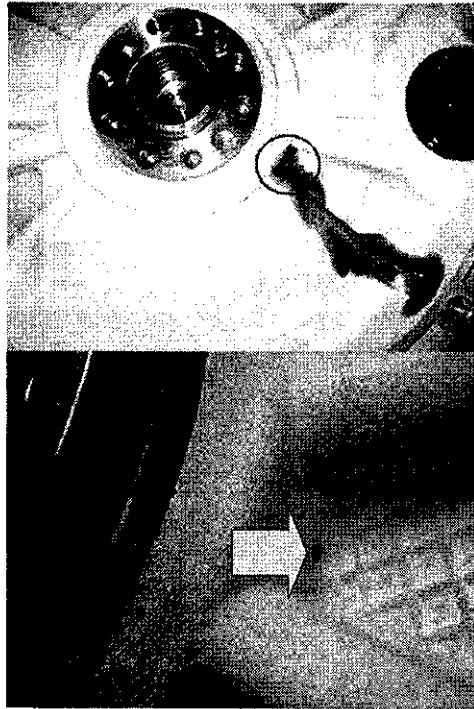
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251.077	156.980	722.907
251.177	156.980	722.907

Attachments

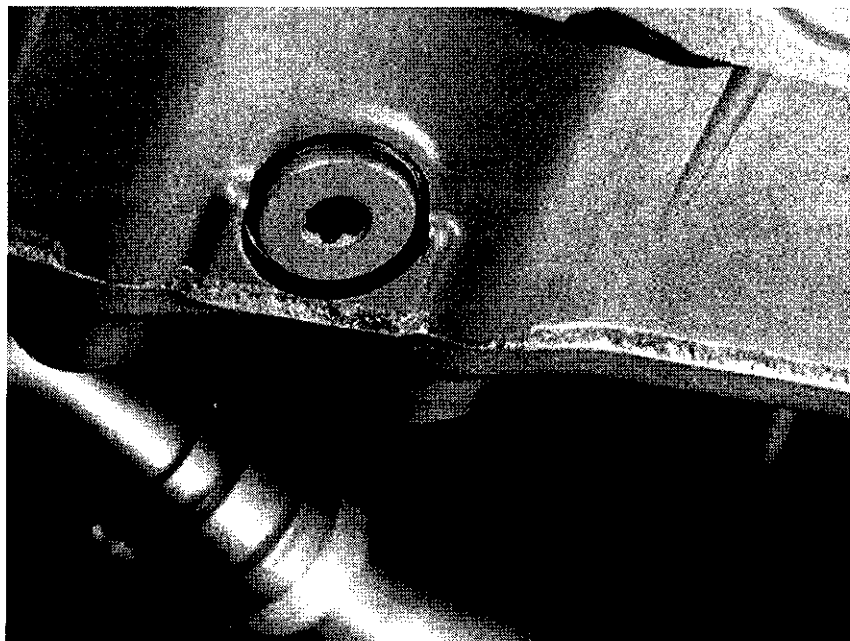
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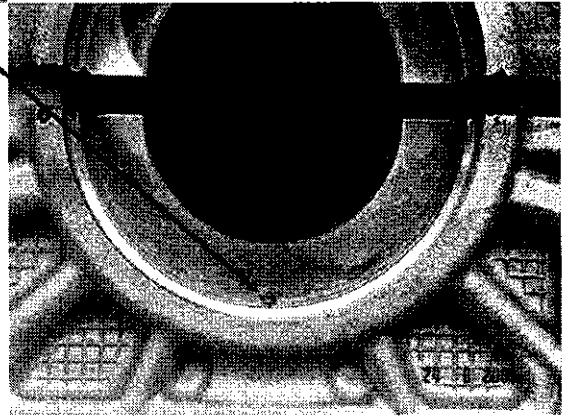
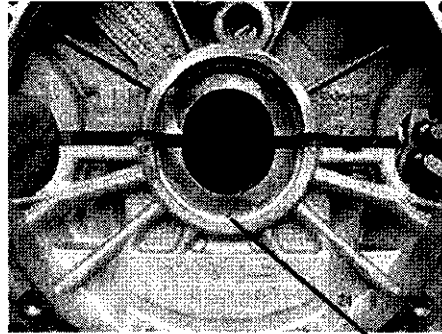
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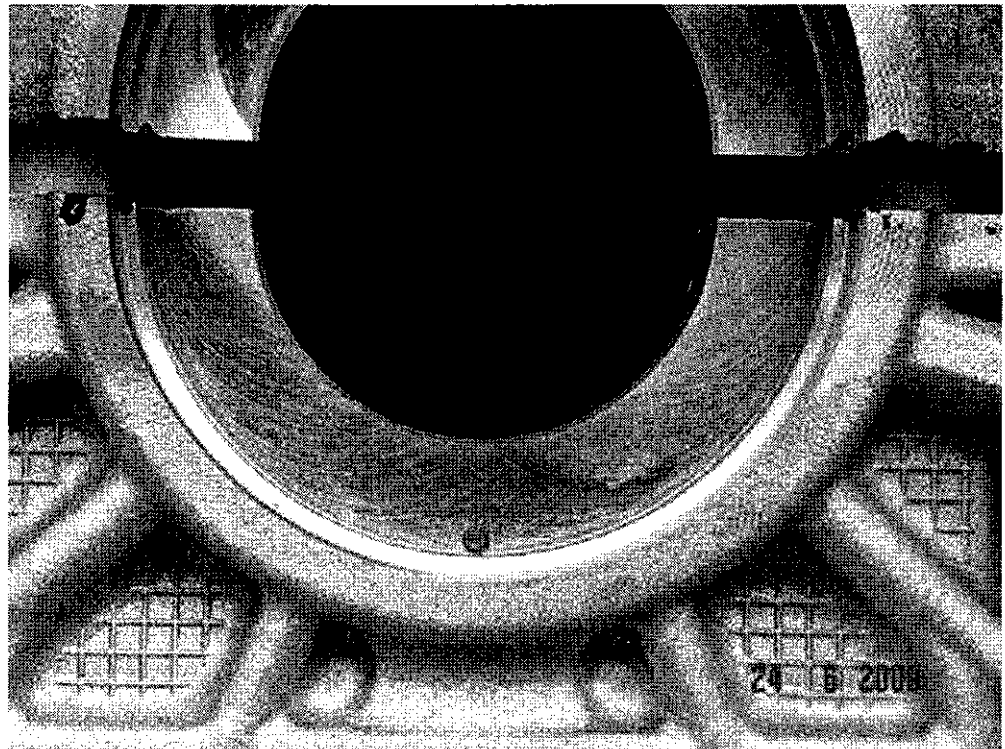
5.JPG:



1.jpg:



2.jpg:



DTB Name: LI01.40-P-051897_Ver.1c

Cause No.	Cause Description	Damage Code
1	Seal ring, crankshaft rear Leaks	03011 04

Scenario Id	Scenario Description
1	Replace Crankshaft Simmerring seal

Cause No.	Cause Description	Damage Code
2	Crankcase Porous	01001 12

Scenario Id	Scenario Description
1	Replace Crankcase

Cause No.	Cause Description	Damage Code
3	Latch, rear, crankcase Leaks	01076 04

Scenario Id	Scenario Description
1	Replace Core hole bolt