

Knocking noise from crank assembly, noise from the engine

Topic number	LI03.10-P-052286
Version	3
Design group	03.10 Connecting rods, pistons
Date	05-23-2013
Validity	Vehicles with engine 272 with 3.5 liters displacement and engine 273 with 4.6 liters displacement. Affected vehicles are mostly in production dates from August 2010 to November 2010 but might be outside of this range.
Reason for change	Remedy revised. DV removed.

Complaint:

Knocking noise from crank assembly. Clattering noise from the engine. Might be incorrectly diagnosed as lifter noise or camshaft adjuster noise.

Attachments	
File	Designation
engine noise.mp3	Example file of engine noise
example of damaged cylinder.JPG	Example picture of damaged cylinder

Cause:

Noise caused by scuffed, damaged cylinders resulting from scratching cylinder walls by the pistons oil scraper ring.

Remedy:

Compare the engine noise to the attached sound file.

Inspect cylinder walls with a light probe (bore scope). Refer to the attached illustration of damage example. Refer also to other published documentation to evaluate cylinder wall damages.

If the noise is related to the cylinder wall scoring as per attached example, the engine must be replaced.

After correctly diagnosing the issue, proceed with repairs.

This situation was corrected on engines as of production numbers listed below:

Engine 2729xx 31932895

Engine 2739xx 30441186

Symptoms
Power generation / Engine noise / Ticking
Power generation / Engine noise / Knocking/clacking
Power generation / Engine noise / Chattering
Power generation / Engine noise / Grinding

Power generation / Engine noise / Rattling
Power generation / Engine noise / Clattering
Power generation / Engine noise / Pounding
Power generation / Engine noise / Makes noise
Power generation / Engine noise / Rings/knocks