

 Preview Solution CBR-997-9

Oil Leak At Clutch And Flywheel Housing; Possible Burnt Clutch Smell And/Or Clutch Slipping; Report Of Crankshaft Rear Main Seal Leak

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Valid For

All vehicles model year 2014 to current.

Solution

Vehicles may present with oil leak coming from the clutch/flywheel housing and observation of burned clutch smell or clutch slipping. These symptoms can be mistaken as a crankshaft rear main seal leak, when the actual cause is the crankshaft adaptor O-ring.

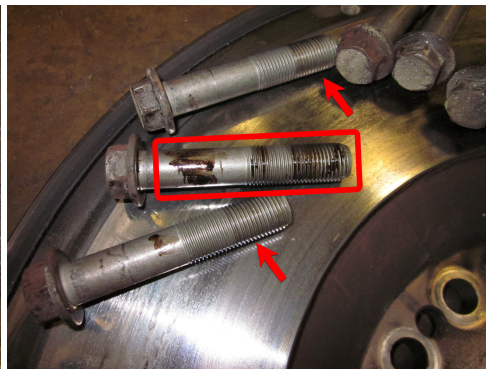
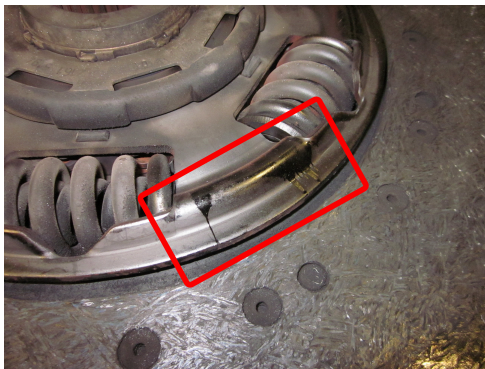
Overview

The o-ring that seals the rear crank gear flange to the crankshaft can leak oil into the cavity on the rear of the crank. This oil builds up and leaks out under the bolt heads of the flywheel and contaminates the clutch. The oil in the flywheel/clutch housing will be black like engine oil and the evidence of the leak will be all the way around the housing due to the oil being slung out of the clutch assembly. When the source of the leak is the crankshaft rear main seal or a transmission seal, oil will run down the face of the engine or the transmission and pool in the bottom of the housing. Oil will not be distributed all the way around the housing as it would from the rear crank gear flange o-ring.

Several examples of visual symptoms of this issue can be seen below (all pictures can be clicked for full-size image):



Engine Oil Accumulation in Bottom of Flywheel Housing



Engine Oil on the Clutch Disk and Flywheel Bolt threads



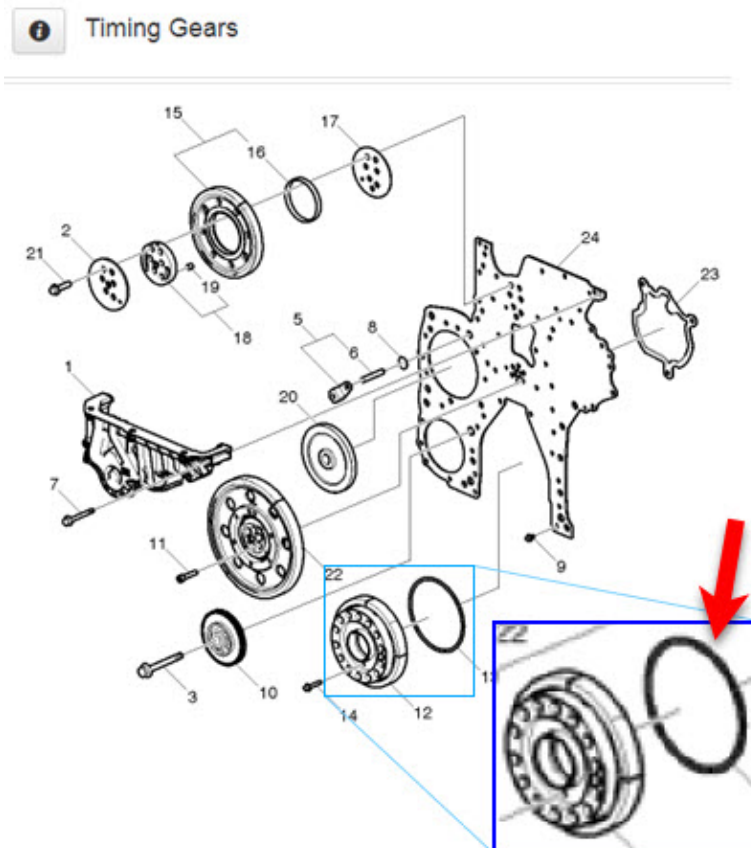
Engine Oil Leak - Not from Main Seal - Note that there is no oil path visible from the bottom of the crank flange down the face of the housing to the visible buildup



Oil Film visible on inner circumference of the Clutch Housing

Repair

A. This repair will require the removal of the flywheel housing in order to remove the rear crank flange adaptor and replace the o-ring. An exploded diagram showing the o-ring can be seen below:



Note that the O-ring is located under the Timing Gear assembly in Impact, not the Crankshaft assembly.

- The procedure for flywheel housing removal and reinstallation can be found in the Service tab of Impact, Operation [2125-03-02-03 Flywheel Housing, Replacement](#).

B. The clutch and pressure plate need to be replaced.

- **Warranty Note:** Clutch coverage should be reviewed when performing this repair. Coverage is not guaranteed by this solution.

C. The flywheel should be cleaned and inspected, then resurfaced or replaced as necessary.

- Flywheel resurfacing guidelines can be found in the service tab of Impact, [Function Group 216](#).
- **If the flywheel is blued on the back side**, it must be replaced. Refer to the guidelines above to assist with assessment.

Related links and attachments

No links or attachments available



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