

# **Service Bulletin**

# TECHNICAL

Subject:	Oil Leak at Rear of Engine

- Models:2015 Chevrolet Cruze, SonicEquipped with 1.4L Engine (RPO LUV)Built After VIN Breakpoint F7182003 (Cruze) and F4169885 (Sonic)
- Attention: This Bulletin only applies if the root cause of an oil leak is from the improperly drilled crankshaft threads and to reference future service on affected vehicles.

# Condition

Some customers may comment about an engine oil leak. Technicians may find the oil coming from the rear of the engine, a possible crankshaft rear oil seal leaking.

#### Cause

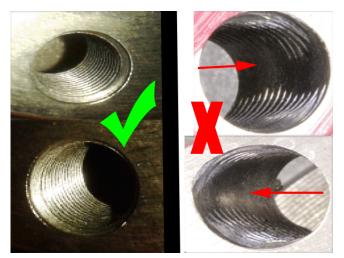
The actual cause for the engine oil leak may be coming from the transmission flex plate or flywheel bolts due to the crankshaft threads being improperly drilled.

# Correction

If the condition above is present, removal of the transmission flex plate or flywheel is necessary to inspect for improperly drilled crankshaft threads that are used for the flex plate or flywheel bolts.

#### Crankshaft Thread Inspection:

Remove the transmission flex plate or flywheel. Refer to the Automatic Transmission Flex Plate Replacement or Engine Flywheel Replacement in SI.
Note: Ensure to use NEW bolts whenever the automatic transmission flex plate or flywheel is removed.



- 2. Inspect the 6 crankshaft threaded bores as illustrated above.
  - Threads on the left of the image have the complete circumference of threads and is **NOT** the root cause of the oil leak.

• Threads on right of the image have the partially, not complete circumference of threads and is most likely the root cause of the oil leak.

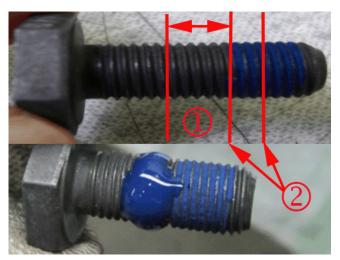
Note: If the threads are incorrect, there will be oil present on the bolts' threads and mating surface to the flywheel or flex plate.

- 3. If all of the threads in the bore are correct, do not use this procedure because this is not the root cause of the oil leak. Continue diagnoses of the origins of the oil leak.
- 4. If the threads are incorrect, clean the affected threads with M 9x1 mm thread cutter.

Important: In order to avoid engine contamination, do NOT go past the depth of 20 mm with the cutter.

**Note:** The thread cutter will not correct the lack of threads in the bore. It is only used to clean the remaining bolt thread lock in the bore to allow for a better sealer adhesion.

5. Clean all 6 crankshaft bores with Brake Cleaner or equivalent.



6. Before reinstalling the flex plate or flywheel, apply Sealant P/N 12345382 (in Canada, use 10953489) or Loctite 243 or equivalent to the 6 bolts as illustrated above.

Note: Do NOT replace the clutch pressure and driven plate if it is not oil contaminated.

- Ensure to cover 4-5 threads (1) of the bolt before the pre-applied thread lock and cover 1-2 threads (2) of the pre-applied thread lock.
- 7. Reinstall the transmission flex plate or flywheel. Refer to the Automatic Transmission Flex Plate Replacement or Engine Flywheel Replacement in SI.

#### Service of the Transmission Flex Plate or Flywheel

Some engines and vehicles were serviced at the assembly plant for this condition and are outside of the published VIN range in this bulletin. If the engine or vehicle was serviced at the assembly plant, for this condition, there will be a green dot or mark on the 6 flex plate or flywheel bolts. This is an indicator that the service procedure in this bulletin has been performed. On all 2015 Chevrolet Cruze and Sonic vehicles with a 1.4L (LUV) engine, all future flex plate or flywheel bolt removal will require this bulletin's inspection and service procedure to be performed.

If this bulletin's repair procedure was performed in the dealer service, it will not have any green paint marks applied to the bolts. Please use Investigate Vehicle History (IVH) to confirm if this bulletin has been applied to the vehicle. The claiming of the unique labor code in this bulletin indicates that the engine was serviced for improperly drilled bolt holes and reapplication of the sealer is necessary upon installation of the flex plate or flywheel bolts.

The unique labor operation in this bulletin can be only claimed once per vehicle. When applying the inspection and repair procedure in this bulletin after it was previously performed, use Other Labor Hours (OLH) not to exceed 0.3 hr. to the labor operation being claimed.

#### **Parts Information**

Part Number	Description	Qty
55571538	BOLT, A/TRNS FLEX PLATE	6
55559650	BOLT, FLYWHEEL ptxt	6
12345382* (in Canada, use 10953489)	Sealant	1

\*There is enough material to perform multiple vehicles. Store the remaining material for future use.

# Warranty Information

For vehicles repaired under the Powertrain coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

#### Note:

- This unique labor operation number should only be claimed once per vehicle.
- Do not use this unique labor code if the crankshaft thread bores are correctly drilled. Use the appropriate labor code for the repair that corrects the oil leak.

Labor Operation	Description	Labor Time
4080908*	Clean Crankshaft Threads and Apply Sealant to Bolts (Automatic Transmission)	7.4 hrs
	Clean Crankshaft Threads and Apply Sealant to Bolts (Manual Transmission)	6.8 hrs
*This is a unique Labor Operation for Bu	lletin use only. It will not be published in the Labor Time Guide.	

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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