



# Service Bulletin

## PRELIMINARY INFORMATION

**Subject:** Shudder And/or Hard shifting Into 1st Gear Or Reverse

**Models:** 2014-2015 Chevrolet Corvette  
Built with an 6.2L LT1 engine and manual transmission

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

### Condition/Concern

Customers may have a concern of a Shudder and/or Hard shifting into 1st gear or Reverse

### Recommendation/Instructions

This concern could be caused by excessive crankshaft end play.

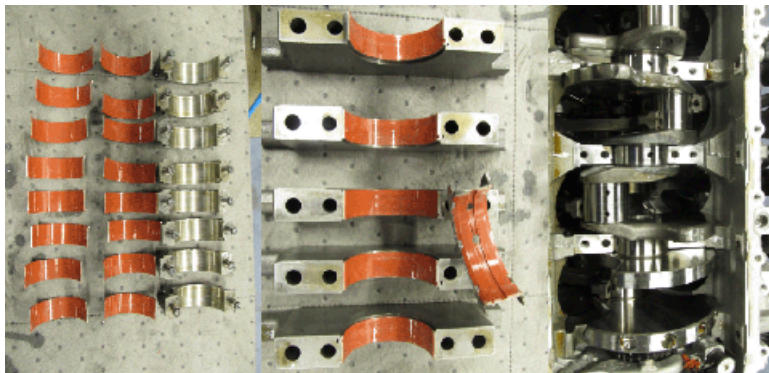
Check to determine if the crank shaft end play is within specification 0.0015–0.0086 in (0.040–0.220 mm).

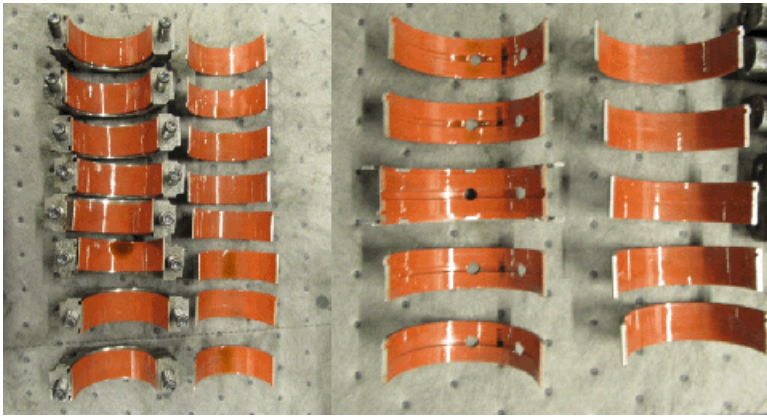
If end play is found to be out of specification, remove engine and inspect for possible Crankshaft thrust bearing and/or crankshaft for wear.

Check the following to Determine if there are any Crankshaft Thrust Bearing concerns –

Inspect oil pan for possible evidence of bearing debris

If bearing debris is found in the oil pan and all Thrust Bearings are found to be worn on both the front and/or rear of the thrust surface, refer to PIP5230A SI Diagnostics Determines The Engine Repair requires Crankshaft Replacement





If both the main bearings and connecting rod bearings show no signs of significant wear (surface finish is not dull)

Main Bearings show no signs of scratching or smearing that would indicate a possible spun bearing (rotated in the Main Cap).

Replace crankshaft, thrust bearing and main bearings

For this repair the oil tank with lines and oil cooler are both required to be replaced if equipped.

## Warranty Information

For vehicles repaired under warranty use:

Labor Operation	Description	Labor Time
4066750	Crankshaft Replacement	Use Published Labor Operation Time

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

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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