

## TECHNICAL

Bulletin No.: 06-06-01-014C

Date: June 25, 2008

### Subject:

L36, L67, L26, L32, LA1, LX9, MN7, M15 Ticking or Knocking Type Noise Coming From Engine or Transmission Area (Replace Flexplate and Torque Converter)

### Models:

2005 Buick Park Avenue

2005-2006 Buick Allure (Canada Only), LaCrosse, LeSabre, Rendezvous, Terraza

2005 Chevrolet Impala, Monte Carlo, Venture

2005-2006 Chevrolet Malibu, Malibu Maxx, Uplander

2005 Pontiac Aztek, Bonneville

2005-2006 Pontiac Grand Prix, G6 GTP, Montana SV6

2006 Saturn Relay AWD

with 3800 3.8L Series III V6 Engine (VINs K, 1, 2, 4, - RPOs L36, L67, L26, L32) or 3500 3.5L V6 Engine (VINs L, 8 RPO LX9) or 3400 3.4L V6 Engine (VIN E - RPO LA1) and Hydra-Matic(R) 4T65-E Transmission (RPOs MN7, M15)

### Supersede:

This bulletin is being revised to update the pictures for better clarification. Please discard Corporate Bulletin Number 06-06-01-014B (Section 06 - Engine/Propulsion System).

### Condition

Some customers may comment on a ticking or knocking type noise coming from the engine or transmission area.

### Cause

Typically the noise is caused by either the transmission rear dust cover contacting the flexplate (refer to Corporate Bulletin Number 05-06-01-028) or a cracked flexplate (sometimes also referred to as a flywheel).

### Correction

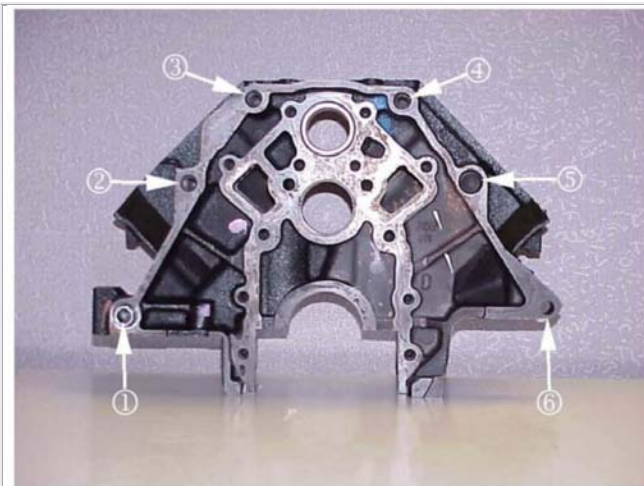
With the vehicle raised and supported on a suitable hoist, verify that the noise is coming from the flexplate area. If the noise is present, follow the procedure below. If the noise is not coming from the flexplate area, refer to Lower Engine Noise, Regardless of Engine Speed in SI.

**Important:** The following information only applies to vehicles with the noise coming from the flexplate area.

1. Remove the front and rear transmission dust covers as described in Corporate Bulletin Number 05-06-01-028.
2. With the covers removed, is the noise still present?
  - ^ If the noise is gone, then perform the steps found in Corporate Bulletin Number 05-06-01-028 to modify and reinstall the cover.
  - ^ If the noise is still present, then proceed to Step 3 below.
3. Remove the starter motor. Refer to Starter Removal in SI.
4. Remove the three bolts attaching the flexplate to the torque converter.
5. After the three bolts have been removed, slightly move the torque converter away from the flexplate.
6. Reinstall the starter motor and restart the engine.
7. Is the noise still present?
  - ^ If the noise is still present, it is NOT being caused by a cracked flexplate. Refer to SI for information on diagnosing the source of the noise.
  - ^ If the noise is gone, proceed to Step 8 below.
8. Remove the transmission assembly. Refer Transmission Assembly Removal in SI.
9. Once the transmission is removed, inspect the flexplate on the rear of the engine for cracks.
 

**Important:** Only proceed to the next step if crack(s) in the flexplate are found.
10. If crack(s) are found, remove the flexplate from the engine.
 

**Important:** Steps 11 through 16 only apply to the 3800 L26, L32, L36 and L67 V6 engine. Proceed to Step 17 for all other applications.



- 9 o'clock Dowel Pin
- 10 o'clock Bolt Hole
- 11 o'clock Bolt Hole
- 1 o'clock Bolt Hole
- 2 o'clock Bolt Hole
- 3 o'clock Bolt Hole

11. Inspect for the presence of alignment dowel pins (bushings) in the rear of the engine block. There should be one dowel pin at the 9 o'clock position and one at the 2 o'clock position.
12. Inspect the dowel pins for the following:
  - ^ Verify that the pins are tight in the block.
  - ^ Verify that the pins have a smooth finish and are not bent. Dowels should be straight in the hole and not mushroomed or angled.
  - ^ Verify that the pins are installed deep enough in the block so as not to bottom out in the transmission housing when installed.



13. Inspect the dowel pin at the 2 o'clock position for the condition shown by the arrow in the above picture. Note that the gap may appear on ANY SIDE of the dowel pin. If this condition is found, the complete engine assembly must be replaced.
14. If the condition shown in the above illustration is NOT found, use clamping type pliers (vise grips) to remove the dowel pin from the 2 o'clock position.



15. Inspect the hole in the block at the 2 o'clock position for an out-of-round condition.
  - ^ If the hole is mis-machined or drilled, it will appear somewhat egg or peanut-shaped. You may be able to feel flatness on the sides of the hole as shown by the arrows in the above illustration. If this condition is found, the complete engine assembly must be replaced.
  - ^ If the hole at the 2 o'clock position is NOT out-of-round, proceed to the next step.
16. Install a NEW dowel pin in the block at the 2 o'clock position.

**Important:** Step 17 should only be performed if the dowel pin hole at the 2 o'clock position is NOT out-of-round.
17. Remove the torque converter from the transmission and inspect the transmission oil pump shaft splines (item 227 in technicians (item 227 in technicians guide) for any deformation and/or damage.
  - ^ Note if there is any difficulty in removal of the torque converter is encountered. You should be able to remove the torque converter from its transmission support shaft by hand if the pump shaft shoulder splines are not damaged. If any use of tools, such as screwdrivers and/or pry bars are required, it must be noted and damage to the transmission pump shaft suspected (if not visually apparent) and replace if required. If any damage to the pump shaft splines is noted or suspected, replace the flexplate, the pump shaft and the torque converter.

^ The holes in the transmission bell housing that the dowel pins go into when installed in the transmission should not be gouged or damaged. Gouging or damaged holes would indicate a misalignment to the dowels in the engine block.

18. If there are no signs of deformation and/or damage, install both the flexplate and the torque converter together.
19. Install the transmission in the vehicle. Refer to Transmission Assembly Installation in SI.
20. Install the starter and the front and rear dust covers. Refer to Starter Installation in SI and refer back to Step 1 in this bulletin installation of the front and rear dust covers.
21. Lower the vehicle.

Part Number	Description	Engine RPO	Qty
24508110	Flexplate	L26, L36, L67	1
24506809	Flexplate	L32	1
12579453	Flexplate	LA1, LX9	1

Part Number	Year	Vehicle Model	Trans. RPO
12491978	2005	C	M15
12491978	2005	H	M15
12491980	2005	B	MN7
12491980	2006	B	MN7
12491980	2005	H	MN7
12491980	2005	W	MN7
12491980	2006	W	MN7
24212743	2004	W	M15
24212743	2005	W	M15
24212743	2006	W	M15
24224255	2005	B	M15
24224255	2006	B	M15
24224255	2005	U	M15
24224255	2006	Z	M15

### Parts Information

### Warranty Information

Labor Operation	Description	Labor Time
J1400	Flywheel (Automatic Transmission/Transaxle) – Replace	Use Published Labor Operation Time

For vehicles repaired under warranty, use the table.

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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