5.4L 3V – INTERMITTENT RATTLE NOISE WHILE DRIVING / ROUGH IDLE WHEN ENGINE IS AT OPERATING TEMPERATURE

TSB 14-0114

FORD:

2004-2010 F-150 2005-2010 F-250, F-350 2005-2013 Expedition

LINCOLN:

2006-2008 Mark LT 2005-2013 Navigator

This article supersedes TSB 12-7-10 to update the vehicle model years and Service Procedure.

ISSUE

Some 2004-2010 F-150, 2005-2010 F-Super Duty 250/350, 2005-2013 Expedition, Navigator and 2006-2008 Mark LT vehicles equipped with 5.4L 3V engine may exhibit an intermittent rattle noise while driving from idle up to 1200 RPM when the engine is at operating temperature. In severe cases, a rough idle and diagnostic trouble codes (DTCs) P0022, P0021, P0340, and/or P0341 may be stored in the powertrain control module (PCM).

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

Replace the left and right variable cam timing (VCT) solenoids. Refer to Workshop Manual (WSM), Section 303.

PART NUMBER	PART NAME	
8L3Z-6M280-B	VCT Solenoid	
7L1Z-6584-B	Left Side Cam Cover Gasket—14 Bolt Cam Cover	
7L1Z-6584-A	Right Side Cam Cover Gasket—8/9 Bolt Cam Cover	
3L3Z-6584-EA	Right Side Cam Cover Gasket—14 Bolt Cam Cover	
3L3Z-6584-DB	Left Side Cam Cover Gasket—15 Bolt Cam Cover	
3L3Z-6C535-AA	VCT Solenoid To Cam Cover Gasket	

OPERATION	DESCRIPTION	TIME
140114A	2005-2006 Expedition, Navigator F-Super Duty 250/350 2004-2006 F-150, 2006 Mark LT 5.4L 3V: Retrieve DTCs And Replace Both VCT Solenoids (Do Not Use With Any Other Labor Operations)	0.6 Hr.
140114A	2008-2010 F-Super Duty 250/350 5.4L 3V: Retrieve DTCs And Replace Both VCT Solenoids (Do Not Use With Any Other Labor Operations)	2.6 Hrs.
140114A	2007-2013 Expedition, Navigator, 2007 F-Super Duty 250/350 5.4L 3V: Retrieve DTCs And Replace Both VCT Solenoids (Do Not Use With Any Other Labor Operations)	3.1 Hrs.
140114A	2007-2010 F-150, 2007-2008 Mark LT 5.4L 3V: Retrieve DTCs And Replace Both VCT Solenoids (Do Not Use With Any Other Labor Operations)	3.5 Hrs.

NOTE: The information contained in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford, Lincoln, or Mercury dealership to determine whether the bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supercede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

WARRANTY STATUS:

Eligible Under Provisions Of New Vehicle Limited Warranty Coverage And Emissions Warranty Coverage Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

DEALER CODING

BASIC PART NO.	CONDITION CODE
6M280	42