## Technical Service Information Bulletin

March 4, 2005

Title:

## **FUEL INJECTOR "TICKING" NOISE**

'04 – '05 RX 330



### **TSIB REVISION NOTICE:**

• June 28, 2005: A new section, "Component Identification," has been added; a note has been added to step 2 of the Repair Procedure, and component identification information has been enhanced in Figures 2 and 6.

The previous TSIB should be discarded.

#### Introduction

Some customers with 2004 - 2005 model year RX 330 vehicles may complain of a "ticking" noise from the engine compartment when the engine is idling. Updated fuel main tube and fuel tube clamps are now available. In addition to updated parts, a second fuel pressure pulsation damper assembly has been added to improve this condition.

### **Applicable Vehicles**

 2004 – 2005 model year RX 330 vehicles produced BEFORE the Production Change Effective VINs shown below.

### **Production** Change Information

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN	
	ТМК	2WD	JTJGA31U#50051442	
DV 000		4WD	JTJHA31U#50082938	
RX 330	TMMC	2WD	2T2GA31U#5C024972	
		4WD	2T2HA31U#5C054761	

### Warranty Information

OP CODE	DESCRIPTION		OFP	T1	T2
EG5011	R & R Fuel Pipe Sub–assembly No. 1	1.2	23801–20180	06	50

### **Applicable Warranty\*:**

This repair is covered under the Lexus Comprehensive Warranty. This warranty is in effect for 48 months or 50,000 miles, whichever occurs first, from the vehicle's in-service date.

<sup>\*</sup> Warranty application is limited to correction of a problem based upon a customer's specific complaint.

# Parts Information

PREVIOUS PART NUMBER   CURRENT PART NUM		R PART NAME	
23801–20180	23801–20250	Pipe Sub-assembly, Fuel, No. 1	1
23270–62010 23270–62011		Damper Assembly, Fuel Pressure Pulsation	1
23232–41081		Gasket	4
77298-0E040	Come		1
77298-0E030	Same	Clamp, Fuel Tube, No. 4	2
77298-0E010*			1

<sup>\*</sup> Only if broken during repair.

# Required SSTs

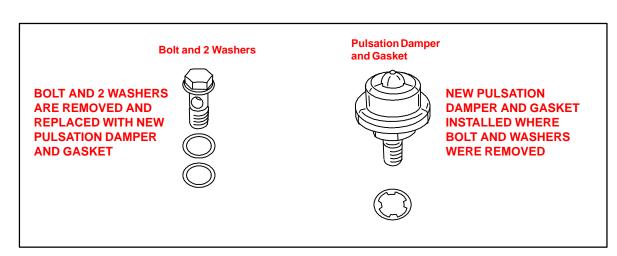
ITEM NO.	SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QTY	DRW**
1	Lexus Diagnostic Tester Kit*  NOTE:  • All components from this kit/set are required  • 12 Megabyte Diagnostic Tester Program Card (P/N 01002593–005) with version 12.1a Software (or later) is required	LEX220036	1	8
2	CAN Interface Module Kit*  NOTE:  • All components from this kit/set are required	01002744	1	8

Essential SSTs.

### **NOTE:**

Additional Diagnostic Tester Kits, CAN Interface Modules, Program Cards, or other SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

# Component Identification

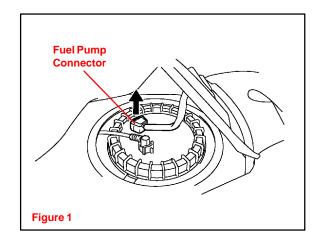


<sup>\*\*</sup> Refers to drawer number in SST Storage System.

### Repair Procedure

### **CAUTION:**

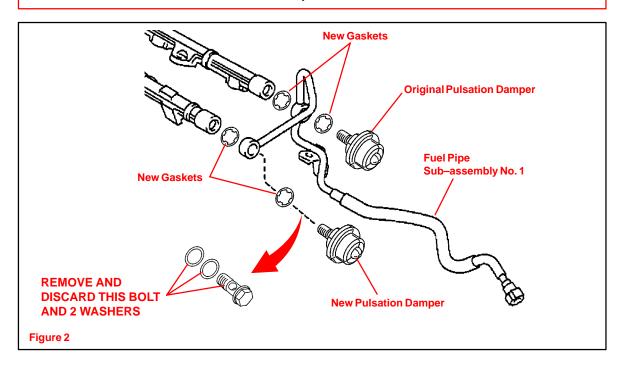
- . Do NOT smoke or work near an open flame when working on the fuel system.
- Keep gasoline away from rubber or leather parts.
- · Wear safety goggles while working with fuel system under pressure.
- Do NOT disconnect any part of the fuel system until you have discharged the fuel system pressure.
- Even after discharging the fuel pressure, place a shop rag over fittings as you separate them to reduce risk of fuel spray on yourself or in the engine compartment.
- 1. Discharge fuel system pressure.
  - A. Disconnect the fuel pump electrical connector via the access panel under the rear seat.
  - B. Start the engine. After the engine has stalled, turn the ignition switch OFF.
  - C. Disconnect the negative (–) battery cable.
  - Reconnect the fuel pump electrical connector and reinstall the rear seat.



2. Disconnect Fuel Pipe Sub-assembly No. 1.

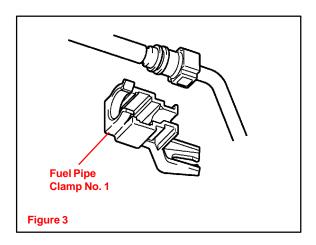
#### NOTE:

- · Ensure that the removed bolt and washers are discarded.
- Refer to the "Component Identification" section on page 2 to ensure that the correct bolt and washers are removed and damper is installed.

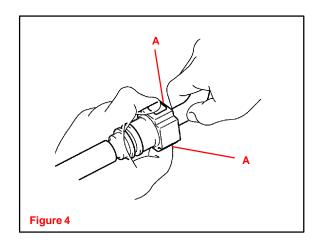


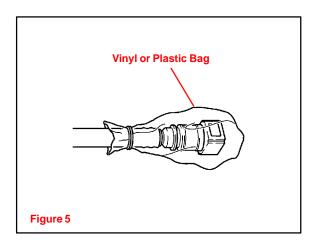
### Repair Procedure (Continued)

- A. Disconnect the fuel pipe clamp No. 1 from the connector.
- B. Check if there is any dirt or mud on the pipe and around the connector before disconnecting the fuel line. Clean if necessary.



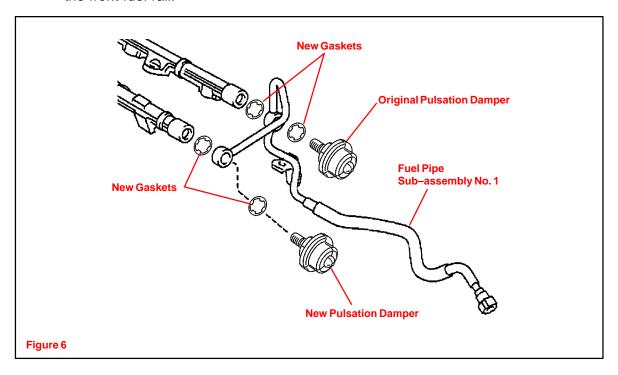
- C. Disconnect the connector from the hose while pinching portion "A" with your fingers as shown in the illustration.
- D. If the connector and pipe are stuck, pinch the fuel pipe and push and pull the connector by hand to disconnect them. Do not use any tools.
- E. Drain the fuel that remains inside Fuel Pipe Sub–assembly No. 1.
- F. Place a tray under the vehicle or point of disconnection, if needed, to catch any fuel that may spill.
- G. Protect the disconnected fuel lines from debris by covering with a vinyl or plastic bag.





Repair Procedure (Continued)

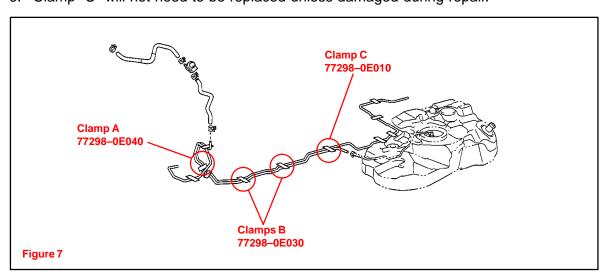
- H. Remove the original pulsation damper from the rear fuel rail.
- I. Remove and discard the remaining bolt holding Fuel Pipe Sub–assembly No. 1 to the front fuel rail.



- 3. Install the new Fuel Pipe Sub-assembly No. 1 onto the vehicle.
  - A. Install both the original pulsation damper and the new (additional) damper with new fuel pipe hose gaskets as shown, and torque to the following specifications.

Torque: 33 N·m (24 ft·lbf, 331 kgf·cm)

- 4. Remove and replace fuel tube clamps "B" if production clamps do not have rubber insulation like service parts.
- 5. Remove and replace fuel tube clamp "A" if it is not a "rigid" style clamp (without rubber insulation).
- 6. Clamp "C" will not need to be replaced unless damaged during repair.



## Repair Procedure (Continued)

- 7. Check for fuel leaks.
  - A. Reconnect the negative (-) battery terminal.
  - B. Connect the Lexus Diagnostic Tester.
  - C. Turn the ignition switch to the "ON" position (do NOT start engine).
  - D. Turn the Diagnostic Tester ON.
  - E. Select "1. DIAGNOSIS" on the Diagnostic Tester.
  - F. Select "2. ENHANCED OBD II."
  - G. Select "3. ACTIVE TEST."
  - H. Select "FUEL PUMP/SPD."
  - I. Turn on the fuel pump with Active Test by pressing the right arrow on the Diagnostic Tester.
  - J. Check for fuel leaks.
  - K. Check and clear any DTCs that may have been set while performing the repair.
- 8. Once confirmed that no leaks are present, take vehicle on a test drive to ensure any air trapped in the pulsation dampers has been purged.
- 9. Repair is complete.