



**Technical Service
BULLETIN**

April 8, 2005

Title:

FUEL INJECTOR "TICKING" NOISE

Models:

'04 – '05 Sienna



ENGINE
EG016-05

Introduction Some customers with 2004 – 2005 model year Sienna vehicles may complain of a “ticking” noise from the engine compartment when the engine is idling. An updated fuel main tube has been made available, and a second fuel pressure pulsation damper has been added to improve this condition.

- Applicable Vehicles**
- 2004 – 2005 model year **Sienna** vehicles.

Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
23801-20171	23801-20270	Pipe Sub-assembly, Fuel, No. 1	1
23270-62010	23270-62011	Damper Assembly, Fuel Pressure Pulsation	1
23232-41081	Same	Gasket	4

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EG5015	R & R Fuel Pipe Sub-assembly No. 1	1.0	23801-20180 23801-20120	06	50



Applicable Warranty*:

This repair is covered under the Toyota Comprehensive Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.

* Warranty application is limited to correction of a problem based upon a customer's specific complaint.



Required SSTs

ITEM NO.	SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QTY	DRW**
1	<p>Toyota Diagnostic Tester Kit*</p> <p>NOTE:</p> <ul style="list-style-type: none"> All components from this kit/set are needed 12 Megabyte Diagnostic Tester Program Card (P/N 01002593-005) with version 12.01a Software (or later) is needed 	TOY220036	1	9
2	<p>CAN Interface Module Kit*</p> <p>NOTE: All components from this kit/set are needed</p> 	01002744	1	9

* Essential SSTs.

** Refers to drawer number in SST Storage System.

NOTE:

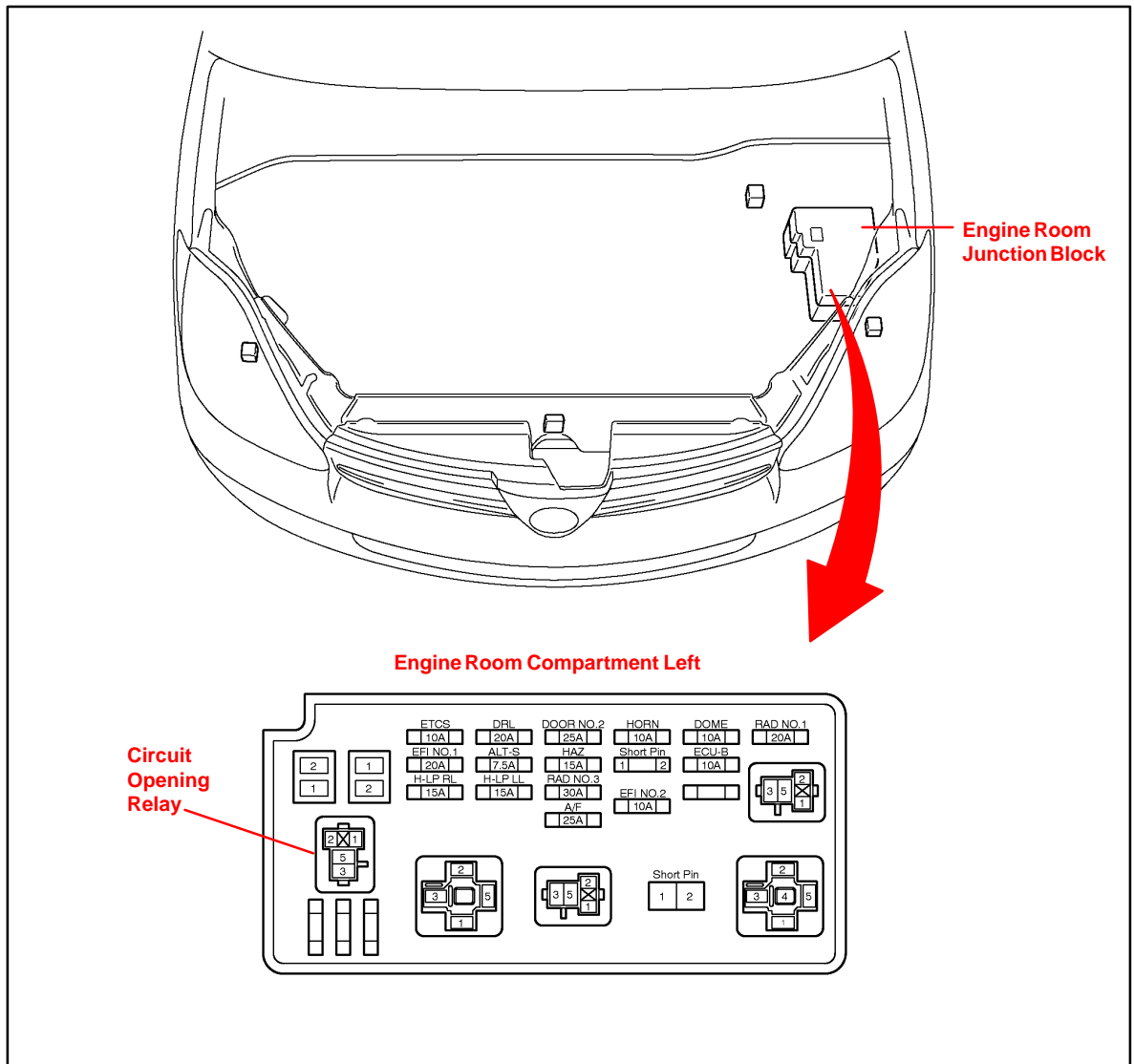
Additional Diagnostic Tester Kits, CAN Interface Modules, Program Cards, or other SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

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.

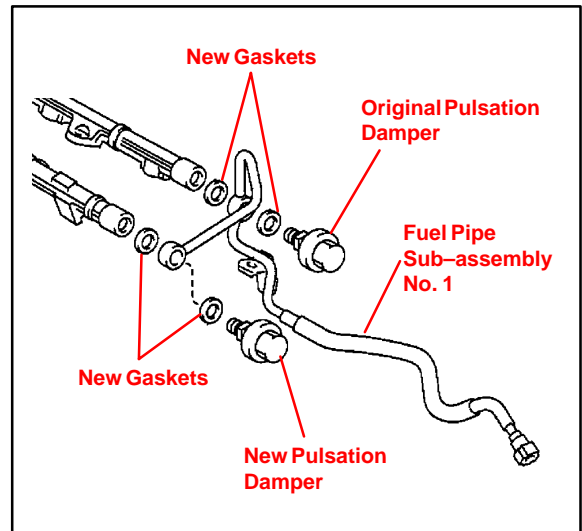
1. Discharge fuel system pressure.
 - A. Remove Circuit Opening Relay from Engine Room Junction Block in the Engine Room Compartment Left (driver’s side).



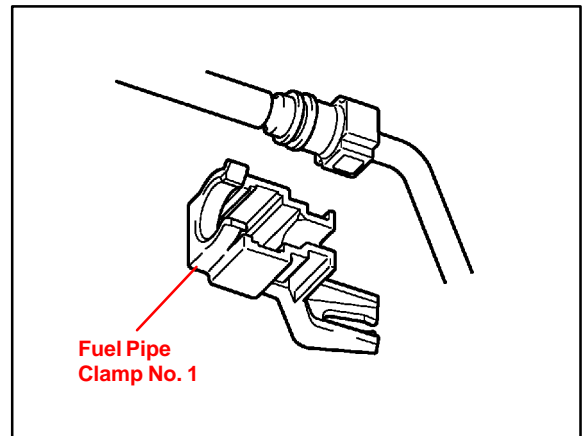
- B. Start the engine. After the engine has stalled, turn the ignition switch OFF.
- C. Reinstall the Circuit Opening Relay.
- D. Disconnect negative (-) battery cable.

Repair Procedure
(Continued)

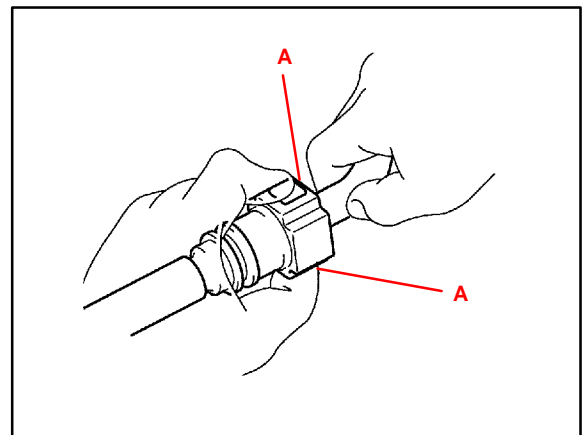
2. Disconnect Fuel Pipe Sub-assembly No. 1.



- 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.

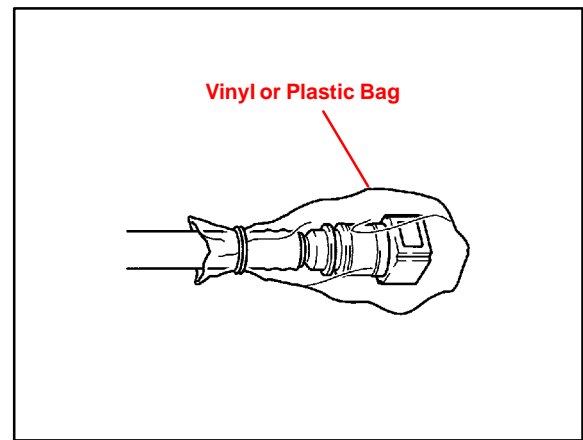


- C. Disconnect the connector from the hose while pinching portion "A" with your fingers as shown in the illustration.
- D. If the connector and pipe are stuck, pinch the fuel pipe; push and pull the connector by hand to disconnect them. Do not use any tools.
- E. Drain the fuel that remains inside Fuel 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.

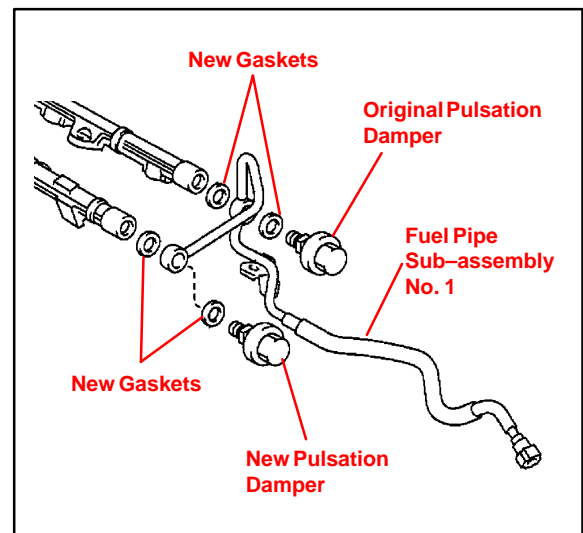


**Repair
Procedure**
(Continued)

- G. Protect the disconnected fuel lines from debris by covering with a vinyl or plastic bag.



- H. Remove original pulsation damper from rear fuel rail.
I. Remove and discard remaining bolt holding Fuel Pipe Sub-assembly No. 1 to front fuel rail.
3. Install the new Fuel Pipe Sub-assembly No. 1 onto the vehicle.
4. 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)

5. Check for fuel leaks.
- Reconnect the negative battery terminal.
 - Connect the Toyota Diagnostic Tester.
 - Turn the ignition switch to the "ON" position (do NOT start engine).
 - Turn the Diagnostic Tester ON.
 - Select "1. DIAGNOSIS" on the Diagnostic Tester.
 - Select "2. ENHANCED OBD II."
 - Select "3. ACTIVE TEST."
 - Select "FUEL PUMP/SPD."
 - Turn on the fuel pump with Active Test by pressing the right arrow on the Diagnostic Tester.
 - Check for fuel leaks.
 - Check and clear any DTCs that may have been set while performing the repair.
6. 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.
7. Repair is complete.