

Secondary Air Injection System - MIL "ON" DTC P2440, P2442, and/or P2445 (1GR-FE)

Service Category Engine/Hybrid System

Section Emission Control

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2012	Tacoma	WMI(s): 3TM, 5TF Body Type(s): Access Cab, Extra Cab Transmission(s): 5AT, 6MT

REVISION NOTICE

May 11, 2018 Rev1:

- The entire bulletin has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2012 model year Tacoma vehicles equipped with the 1GR-FE engine may exhibit a MIL "ON" condition with the following Diagnostic Trouble Codes (DTCs):

- P2440 (Secondary Air Injection System Switching Valve Stuck Open Bank 1)
- P2442 (Secondary Air Injection System Switching Valve Stuck Open Bank 2)
- P2445 (Secondary Air Injection System Pump Stuck Off)

This condition may be caused by air injection pump filter damage. Follow the Repair Procedure in this bulletin to address this condition.

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EG1709	R & R Air Pump Assembly, Emission Control Valve Set, and Gaskets, Install Air Pump Cover	0.6	17600-0P040	8A	99

APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.
- For California specification 2012 model year vehicles sold, registered, and operated in Arizona, California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, Oregon, Pennsylvania, Rhode Island, Washington, and Vermont, this repair may be covered depending on vehicle model year, under the California Emission Warranty, which is in effect for 84 months or 70,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
25710-31021	25710-31022	Valve Assy, Air Switching	1
N/A	17613-0P010	Cover, Air Pump	1
17610-0W020		Pump Assy, Air	1
17376-50010		Gasket, Air Tube	2
17377-31010		Gasket, Air Tube, No. 2	1

NOTE

- If evidence of air injection pump filter damage is present in the air injection pump and/or the air switching valves, it is imperative to replace the air pump and the air switching valves.
- ALL parts listed in this bulletin MUST be replaced to ensure the condition is properly addressed. Failure to replace ALL parts may result in comeback repairs.

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Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

* Essential SST.

NOTE

- ONLY ONE of the Techstream units listed above is required.
- Software version 13.00.022 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

Repair Procedure

- Using Techstream, perform a Health Check.
Are ANY of the following DTCs present?
 - P2440 (Secondary Air Injection System Switching Valve Stuck Open Bank 1)
 - P2442 (Secondary Air Injection System Switching Valve Stuck Open Bank 2)
 - P2445 (Secondary Air Injection System Pump Stuck Off)
 - **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- Replace the following air injection system components to ensure reliability:
 - Air pump
 - Air pump cover
 - Air switching valve
 - Air switching valve gaskets
- Refer to TIS, applicable model and model year Repair Manual:
 - 2012 Tacoma:
Engine/Hybrid System – Engine Control – “1GR-FE Emission Control: Air Pump (w/ Secondary Air Injection System): [Removal](#) / [Installation](#)”
 - 2012 Tacoma:
Engine/Hybrid System – Engine Control – “1GR-FE Emission Control: Air Switching Valve (w/ Secondary Air Injection System): [Removal](#) / [Installation](#)”

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Repair Procedure (continued)

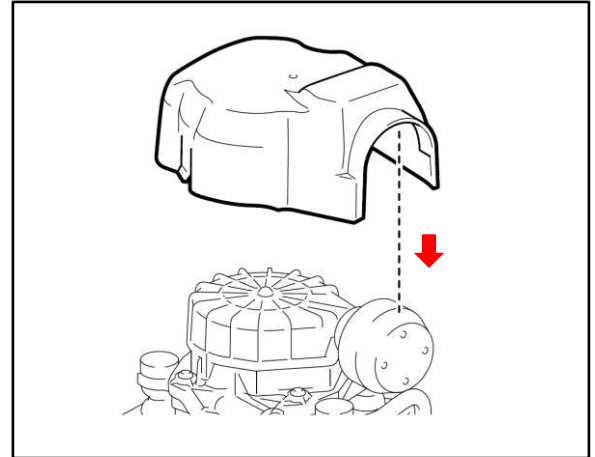
- B. Install the air pump cover.

NOTICE

Air pump cover installation will reduce the possibility of filter damage.

- (1) Place the air pump cover over the air pump, making sure to follow the contours of the air pump.
- (2) Apply downward pressure until a click is heard.
- (3) Confirm the air pump cover is fully seated.

Figure 1.



3. Clear the DTCs and test drive the vehicle to confirm the condition is addressed.