

MIL "ON" P043E, P043F, P2401, P2402, & P2419 Due to Water Intrusion into Charcoal Canister

Service Category Engine/Hybrid System

Section Emission Control

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2009 – 2011	Corolla	
2009 – 2011	Matrix	

Introduction

Some 2009 – 2011 model year Corolla and Matrix vehicles may exhibit a MIL "ON" condition with the DTCs P043E, P043F, P2401, P2402, and P2419. This can be caused by water or debris entry into the evaporative control system through the fresh air inlet. To address this condition, the fuel pipe protector has been updated to help prevent water intrusion into the fuel filler pipe cover.

NOTE

All 5 DTCs **MUST** be present for this TSB to be applicable.

Production Change Information

This TSB applies to:

- All 2009 – 2011 NUMMI produced Corolla vehicles.
- All vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
Corolla	Takaoka	FF	JTDBU4EE#BJ106944
	TMMC	FF	2T1BU4EE#BC726281
Matrix		FF	2T1KU4EE#BC726212
		FF/AWD	2T1LE4EE#BC020546

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Warranty Information

OP CODE	MODEL	DESCRIPTION	TIME	OFP	T1	T2
EG9062	XRS & 4WD	R & R Fuel Tank Filler Pipe Cover Holder, Cover, Protector, Charcoal Canister, & Filter	1.1	77740-02##0	8A	88
	All Other Models		1.0			

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.
- For California specification vehicles sold, registered, and operated in California, Connecticut, Maine, Maryland (starting with '11 MY), Massachusetts, New Mexico ('11 MY only), New Jersey, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington, this repair is covered under the California Emission Warranty, which is 36 months or 50,000 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.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* or Techstream Lite NOTE: Software version 6.10.041 or later is required.	ADE	TSPKG1 or TSLITEDLR01	1

* Essential SST.

NOTE

Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

Parts Information

MODEL	PRODUCTION	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Corolla	All	77740-02130	Same	Canister Assy, Charcoal	1

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Parts Information (Continued)

MODEL	PRODUCTION	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Corolla	CBU	77779-12040**	Same	Tube, Charcoal Canister Outlet (fresh air line)	1
		77219-21010	Same	Cover, Fuel Tank Filler Pipe	1
		77248-21010	Same	Holder, Fuel Tank Filler Pipe Cover	1
		77277-12240	77277-12270	Protector, Fuel Filler Pipe	1
		—	77281-12210	Clamp, Fuel Filler Pipe	1
		77296-12060	Same	Support, Fuel Tube Protector No. 1	1
		90159-60602	Same	Screw, W/ Washer, Tapping	1
	NAP	77779-02020**	Same	Tube, Charcoal Canister Outlet (fresh air line)	1
		77219-06040	Same	Cover, Fuel Tank Filler Pipe	1
		77248-06020	Same	Holder, Fuel Tank Filler Pipe Cover	1
		77277-02080	77277-02140 77277-12270*	Protector, Fuel Filler Pipe	1
		77281-12050	77281-12210	Clamp, Fuel Filler Pipe	1
		—	Same	Holder, Fuel Tank Pipe Setting	1
		77296-02010	Same	Support, Fuel Tube Protector No. 1	1
		90159-60602	Same	Screw, W/ Washer, Tapping	1
Matrix	All	77779-02020**	Same	Tube, Charcoal Canister Outlet (fresh air line)	1
		77219-06040	Same	Cover, Fuel Tank Filler Pipe	1
		77248-06020	Same	Holder, Fuel Tank Filler Pipe Cover	1
		77277-02080	77277-02140 77277-12270*	Protector, Fuel Filler Pipe	1
		—	77281-12210	Clamp, Fuel Filler Pipe	1
		77289-06050	Same	Holder, Fuel Tank Pipe Setting	1
		77296-02010	Same	Support, Fuel Tube Protector No. 1	1
		90159-60602	Same	Screw, W/ Washer, Tapping	1
	2WD (Except XRS)	77740-02130	Same	Canister Assy, Charcoal	1
	4WD	77740-02180			1
	XRS	77740-02190			1

* These part numbers are interchangeable.

** Refer to step 7 of the Repair Procedure.

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Repair Procedure

1. Using TIS Techstream, check for DTCs P043E, P043F, P2401, P2402, and P2419.
 - If the above DTCs are present, proceed to step 2.
 - If all 5 DTCs are NOT present, this TSB does NOT apply, continue diagnostics per the Repair Manual.
2. Check for water or debris in the EVAP system by disconnecting the vent hose from the key-off pump module.

Is water or debris present in the vent hose?

 - **YES** – Proceed to step 3.
 - **NO** – This TSB does NOT apply, continue diagnostics per the Repair Manual.
3. Replace the charcoal canister and charcoal canister filter No. 2 as outlined in the Repair Manual.

Refer to the Technical Information System (TIS), applicable model and model year Repair Manual:

Corolla

- [2009](#) / [2010](#) / [2011](#) Corolla (2AZ-FE):
Engine/Hybrid System – Emission Control – “2AZ-FE Emission Control: Canister: Removal”
- [2009](#) / [2010](#) / [2011](#) Corolla (2ZR-FE):
Engine/Hybrid System – Emission Control – “2ZR-FE Emission Control: Canister: Removal”
- [2009](#) / [2010](#) / [2011](#) Corolla (2AZ-FE):
Engine/Hybrid System – Emission Control – “2AZ-FE Emission Control: Canister: Installation”
- [2009](#) / [2010](#) / [2011](#) Corolla (2ZR-FE):
Engine/Hybrid System – Emission Control – “2ZR-FE Emission Control: Canister: Installation”

Matrix

- 2009 ([2WD](#)) / ([4WD](#)) / 2010 ([2WD](#)) / ([4WD](#)) / 2011 ([2WD](#)) / ([4WD](#)) Matrix (2AZ-FE):
Engine/Hybrid System – Emission Control – “2AZ-FE Emission Control: Canister: (2WD/4WD): Removal”
- [2009](#) / [2010](#) / [2011](#) Matrix (2ZR-FE):
Engine/Hybrid System – Emission Control – “2ZR-FE Emission Control: Canister: Removal”

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Repair Procedure (Continued)

- 2009 ([2WD](#)) / ([4WD](#)) / 2010 ([2WD](#)) / ([4WD](#)) / 2011 ([2WD](#)) / ([4WD](#)) Matrix (2AZ-FE):
Engine/Hybrid System – Emission Control – “2AZ-FE Emission Control: Canister: (2WD/4WD): Installation”
 - [2009](#) / [2010](#) / [2011](#) Matrix (2ZR-FE):
Engine/Hybrid System – Emission Control – “2ZR-FE Emission Control: Canister: Installation”
4. Remove fuel tank filler pipe protector and retain fasteners.
 5. Remove the fuel tank filler pipe assembly (with charcoal canister fresh air line) from the vehicle.
 6. Remove the charcoal canister fresh air line from the filler pipe.
 7. Wash the interior of the charcoal canister fresh air line and allow to dry completely. If any debris/mud or muddy stains are still visible in the line, replace with P/N 77779-##0#0.
 8. Remove and replace the fresh air line cover and cover holder.

NOTE

Only assemble these parts on the fuel tank filler pipe assembly as they cannot be disassembled without damage.

9. Reassemble the fuel tank filler pipe assembly, using updated clamp and reinstall in vehicle.
10. Install the updated fuel tank filler pipe protector using the retained and new fasteners.
11. Clear all DTCs using TIS Techstream.
12. Perform the Automatic EVAP System Check and verify that no pending DTCs set.
System > Engine and ECT > Utility > EVAP System Check

NOTE

If the Automatic EVAP System Check fails to run, perform the following:

- Turn the ignition OFF.
- Turn TIS Techstream OFF.
- Turn the ignition ON and TIS Techstream ON and restart the Automatic EVAP System Check.