


MIL "ON" DTC P0453 - Fuel in EVAP System

Service Category Engine/Hybrid System

Section Fuel System

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2010 – 2014	RX350	Plant Code(s): W

Introduction

Some TMMC built 2010 – 2014 model year RX 350 vehicles may exhibit one or more of the following conditions due to liquid fuel in the Evaporative Emissions system (EVAP system):

- MIL "ON" with Diagnostic Trouble Code (DTC) P0453 stored
- Intermittent rough idle at operating temperature

Follow the repair procedure in this bulletin to address this condition.

Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
RX 350	2WD	2T2ZK1BA#EC147697
	4WD	2T2BK1BA#EC249546

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
77001-0E031	77001-0E032	Tank, Sub-assy, Fuel	1
77740-0E030		Canister Assy, Charcoal	1

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Warranty Information

OP CODE	DESCRIPTION	DRIVETRAIN	TIME	OFF	T1	T2
237011	R & R Fuel Tank Sub-assembly	2WD	2.3	77001-0E031	08	13
		AWD	7.2			
237811	R & R Charcoal Canister	2WD AWD	0.4	77740-0E030		

APPLICABLE WARRANTY

- This repair is covered under the Lexus Basic Warranty. This warranty is in effect for 48 months or 50,000 miles, whichever occurs first, from the vehicle's in-service date.
- For all model years: the Fuel Tank is covered under the Lexus Powertrain Warranty. This warranty is in effect for 84 months or 70,000 miles, whichever occurs first, from the vehicle's in-service date.
- For 2010 MY Only: the Charcoal Canister is covered under the Lexus Powertrain Warranty. This warranty is in effect for 84 months or 70,000 miles, whichever occurs first, from the vehicle's in-service date.
- For California Specification vehicles sold and operated in Arizona ('12 MY only), California, Connecticut, Delaware (starting with '14 MY), Maine, Maryland (starting with '11 MY), Massachusetts, New Jersey, New Mexico ('10-'11 MY), Oregon, Pennsylvania, Rhode Island, Vermont, and Washington, this repair is covered under the California Emission Warranty, which is 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.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
TIS Techstream		TSPKG1	
Techstream Lite		TSLITEDLR01	

* Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 9.00.026 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

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Repair Procedure

1. Using Techstream, check for DTC P0453.

Is DTC P0453 present?

- **YES** — Proceed to step 3.
- **NO** — If NO DTCs are stored in memory, proceed to step 2.

2. Active test the Purge VSV using Techstream with the engine running at idle:
Powertrain > Engine and ECT > Active Test > Activate the VSV for Evap Control

With the VSV cycled ON, did the vehicle run rough or nearly stall?

- **YES** — Proceed to step 3.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

3. Check for fuel in the EVAP system by disconnecting the fuel tank vent line from the charcoal canister.

Is fuel present in the fuel tank vent line?

- **YES** — Proceed to step 4.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

4. Replace the Fuel Tank Assembly.

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

- 2010 RX 350:
Engine/Hybrid System – Fuel System – “2GR-FE Fuel: Fuel Tank: [Removal \(12/2008 – 08/2009\)](#) / [Removal \(08/2009 – \)](#) / [Installation \(12/2008 – 08/2009\)](#) / [Installation \(08/2009 – \)](#)”
- 2011 RX 350:
Engine/Hybrid System – Fuel System – “2GR-FE Fuel: Fuel Tank: [Removal](#) / [Installation](#)”
- 2012 RX 350:
Engine/Hybrid System – Fuel System – “2GR-FE Fuel: Fuel Tank: [Removal](#) / [Installation](#)”
- 2013 RX 350:
Engine/Hybrid System – Fuel System – “2GR-FE Fuel: Fuel Tank: [Removal](#) / [Installation](#)”
- 2014 RX 350:
Engine/Hybrid System – Fuel System – “2GR-FE Fuel: Fuel Tank: [Removal](#) / [Installation](#)”

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Repair Procedure (Continued)

5. Replace the Charcoal Canister Assembly.

Refer to TIS, applicable model and model year Repair Manual:

- 2010 RX 350:
Engine/Hybrid System – Emission Control – “2GR-FE Emission Control: Canister: [Removal \(12/2008 – 08/2009\)](#) / [Removal \(08/2009 – \)](#) / [Installation \(12/2008 – 08/2009\)](#) / [Installation \(08/2009 – \)](#)”
- 2011 RX 350:
Engine/Hybrid System – Emission Control – “2GR-FE Emission Control: Canister: [Removal](#) / [Installation](#)”
- 2012 RX 350:
Engine/Hybrid System – Emission Control – “2GR-FE Emission Control: Canister: [Removal](#) / [Installation](#)”
- 2013 RX 350:
Engine/Hybrid System – Emission Control – “2GR-FE Emission Control: Canister: [Removal](#) / [Installation](#)”
- 2014 RX 350:
Engine/Hybrid System – Emission Control – “2GR-FE Emission Control: Canister: [Removal](#) / [Installation](#)”

6. Confirm the repair.

A. Clear all DTCs.

B. Using Techstream, run the Automatic EVAP System Check and verify NO pending DTCs set.
System Select > Engine and ECT > Utility > EVAP System Check

NOTE

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

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