

# 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 | OFP         | 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<br>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.