Rev1

June 11, 2012



# MIL "ON" DTC P030# and/or Runs Rough on Cold Start

Service

Category Engine/Hybrid System

Section Engine Control Market USA



### **Applicability**

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION	
2010 – 2017	RX450H		

#### **REVISION NOTICE**

December 13, 2017 Rev1:

- Applicability has been updated to include 2013 2017 model year RX 450h vehicles.
- The Introduction and Repair Procedure sections have been updated.

Any previous printed versions of this bulletin should be discarded.

### Introduction

Some 2010 – 2017 model year RX 450h vehicles may exhibit one or more of the following conditions:

- MIL "ON" with DTC P0300/00, P0301/00, P0302/00, P0303/00, P0304/00, P0305/00, and/or P0306/00 present
- Rough running on initial start-up after a cold soak

Follow the Repair Procedure in this bulletin to address these conditions.



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### **Warranty Information**

MODEL YEAR	OP CODE	DESCRIPTION	TIME	OFP	T1	T2
2010 – 2015	895221	221 Replace Fuel Injectors	2.6	23209-31090 23209-0P010	8A	88
2016 – 2017			3.7	23209–31130		i

### **APPLICABLE WARRANTY**

- This repair is covered under the Lexus Federal Emission Warranty. This warranty is in effect for 48 months or 50,000 miles, whichever occurs first, from the vehicle's in-service date.
- For 2011 2012 model year California specification vehicles sold, registered, and operated in Arizona (2012 model year ONLY), California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, New Mexico (2011 model year ONLY), Oregon, Pennsylvania, Rhode Island, Vermont, and Washington, this repair is covered under the California Long Term Emission Warranty, which is in effect for 84 months or 70,000 miles, whichever occurs first, from the vehicle's in-service date. California specification vehicles shipped to other states do NOT assume coverage under the California Long Term Emission Warranty.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

### **Parts Information**

MODEL VEAD	PART NUMBER		DADT NAME	077/
MODEL YEAR	PREVIOUS	NEW	PART NAME	QTY
	23209-31090	23209-31160	Injector Cat. Fuel	6
	23209-0P010	23209-31160	Injector Set, Fuel	0
2010 – 2015	23291-28020	22204 28020	Injector Set, Fuel	6
	23291-0V020	23291-28020		
	17176-0P021	17176-0P021	Gasket, Air Surge Tank to	3
	17176-31090	17176-08021	Intake Manifold	
	25627-31030		Gasket, EGR Valve	1
	17179-31010		Gasket, Intake Manifold	1
	25629-31030		Gasket, EGR Pipe, No. 2	1
	25628-31010		Gasket, EGR Inlet	1



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### **Parts Information (Continued)**

MODEL YEAR	PART NUMBER		5.55	071/
	PREVIOUS	NEW	PART NAME	QTY
2016 – 2017	23209-31130	23209-31190	Injector Set, Fuel	6
	23291-23010			6
	23291-31030	23291-23010	Insulator, Injector Vibration	
	23291-0P010			
	17177-31070	17177 21070	Gasket, Intake Manifold to	2
	17177-0P030	17177-31070	Head, No. 1	

### **Required Tools & Equipment**

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

<sup>\*</sup> Essential SST.

### **NOTE**

- Only ONE of the Techstream units listed above is required.
- Software version 12.20.024 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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## MIL "ON" DTC P030# and/or Runs Rough on Cold Start

### **Repair Procedure**

- 1. Confirm the engine runs rough on initial start-up AFTER cold soak or using Techstream, check for ANY of the following stored DTCs:
  - P0300/00 Random/Multiple Cylinder Misfire Detected.
  - P0301/00 Cylinder 1 Misfire Detected.
  - P0302/00 Cylinder 2 Misfire Detected.
  - P0303/00 Cylinder 3 Misfire Detected.
  - P0304/00 Cylinder 4 Misfire Detected.
  - P0305/00 Cylinder 5 Misfire Detected.
  - P0306/00 Cylinder 6 Misfire Detected.

Are ANY of the DTCs present?

- YES Continue to step 2.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- 2. Perform the misfire diagnosis.

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

- 2010 (to 08/2009) / 2010 (from 08/2009) / 2011 / 2012 / 2013 / 2014 / 2015 / 2016 / 2017 RX 450h:
  Engine/Hybrid System Engine Control "2GR-FXE Engine Control: SFI System: P0300-P0306: Random / Multiple Cylinder Misfire Detected"
- 3. If no concerns are noted with the mechanical engine condition, engine control system, ignition system, or fuel supply system, remove the fuel injectors and visually inspect the fuel injector tips for signs of debris.

Is there debris on ANY of the fuel injector tips?

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

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### **Repair Procedure (Continued)**

4. Replace ALL six fuel injectors.

Refer to TIS, applicable model year Repair Manual:

- 2010 RX 450h:
   Engine/Hybrid System Fuel System "2GR-FXE Fuel: Fuel Injector:
   Removal (to 08/2009) / Removal (from 08/2009) / Installation (from 08/2009)"
- 2011 RX 450h: Engine/Hybrid System – Fuel System – "2GR-FXE Fuel: Fuel Injector: <u>Removal</u> / <u>Installation</u>"
- 2012 RX 450h: Engine/Hybrid System – Fuel System – "2GR-FXE Fuel: Fuel Injector: <u>Removal</u> / <u>Installation</u>"
- 2013 RX 450h: Engine/Hybrid System – Fuel System – "2GR-FXE Fuel: Fuel Injector: Removal / Installation"
- 2014 RX 450h: Engine/Hybrid System – Fuel System – "2GR-FXE Fuel: Fuel Injector: <u>Removal</u> / <u>Installation</u>"
- 2015 RX 450h: Engine/Hybrid System – Fuel System – "2GR-FXE Fuel: Fuel Injector: Removal / Installation"
- 2016 RX 450h: Engine/Hybrid System – Fuel System – "2GR-FXE Fuel: Fuel Injector: Removal / Installation"
- 2017 RX 450h: Engine/Hybrid System – Fuel System – "2GR-FXE Fuel: Fuel Injector: Removal / Installation"
- 5. Clear ALL stored DTCs.
- 6. Start the engine and confirm the repair.