

# MIL "ON" P125D71 – Fuel Flow Control Valve Stuck

**Service Category** Engine/Hybrid System

**Section** Fuel System

**Market** USA

Lexus Supports  
ASE Certification 

## Applicability

| YEAR(S)     | MODEL(S) | ADDITIONAL INFORMATION  |
|-------------|----------|-------------------------|
| 2015 - 2016 | NX200T   | Drive Type(s): 4WD, 2WD |

## Introduction

Some 2015 – 2016 model year NX 200t vehicles may exhibit a MIL “ON” condition with Diagnostic Trouble Code (DTC) P125D71 (Fuel Flow Control Valve Performance Actuator Stuck). Some vehicles may also enter “limp mode” and the Multi-Informational Display (MID) will tell the customer “reduced engine power – take vehicle to nearest dealer”. Follow the procedures 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  | PLANT | DRIVETRAIN  | PRODUCTION CHANGE EFFECTIVE VIN |
|--------|-------|-------------|---------------------------------|
| NX200T | TMK   | FF/F-Sport  | JTJYARBZ#G2039757               |
|        |       | AWD/F-Sport | JTJBARBZ#G2079953               |

## Warranty Information

| OP CODE | DESCRIPTION                            | TIME | OFF         | T1 | T2 |
|---------|--|------|-------------|----|----|
| EG1604  | R & R of Sub-Tank, Fuel, No. 1 and PDV | 2.5  | 77131-78010 | 8A | 99 |

### APPLICABLE WARRANTY

- This repair is covered under the Lexus Federal Emission Warranty. This warranty is in effect for months or 48 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.

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### Parts Information

| PART NUMBER                               |             | PART NAME                      | QTY |
|---|-------------|--------------------------------|-----|
| PREVIOUS                                  | NEW         |                                |     |
| 77131-78010                               | 77131-78011 | Sub-Tank, Fuel, No. 1          | 1   |
| 77024-78020                               |             | Plate, Sub Assy                | 1   |
| 23990-36010                               |             | Valve Assy, Pressure Discharge | 1   |
| 90301-08019<br>90301-04013<br>90301-15024 |             | Ring, O                        | 1   |

### 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 11.10.034 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

### Repair Procedure

1. Using Techstream, confirm the following DTC is present:  
P125D71: Fuel Flow Control Valve Performance Actuator Stuck

Is DTC P125D71 Present?

- **YES** — Go to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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### Repair Procedure (Continued)

2. Perform Active Test using Techstream (*Powertrain – Engine – Active Test – Activate the Fuel Pressure Discharge*).

Does the fuel pressure fluctuate by at least 4 psig?

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

3. Perform Health Check and clear all DTCs.

4. Remove the fuel tank assembly.

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

- [2015](#) / [2016](#) NX 200t:  
*Engine/Hybrid System – Fuel System – “8AR-FTS Fuel: Fuel Tank: Removal”*

5. Remove the fuel pump assembly.

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

- [2015](#) / [2016](#) NX 200t:  
*Engine/Hybrid System – Fuel System – “8AR-FTS Fuel: Fuel Pump: Removal”*

6. Disassemble the fuel pump assembly.

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

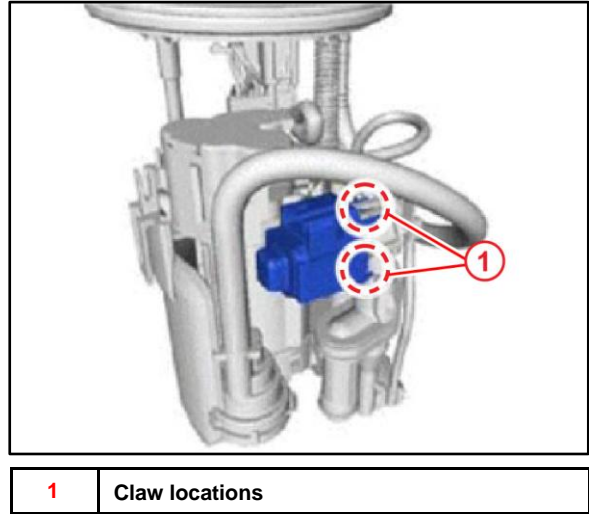
- [2015](#) / [2016](#) NX 200t:  
*Engine/Hybrid System – Fuel System – “8AR-FTS Fuel: Fuel Pump: Disassembly”*

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### Repair Procedure (Continued)

7. Remove the pressure discharge valve from the fuel suction plate sub-assembly.
  - A. Disconnect the connector from the pressure discharge valve assembly.
  - B. Detach the 2 claws and pressure discharge valve assembly from the fuel suction tube assembly with pump.

**Figure 1.**



8. Install the new pressure discharge valve and attach the 2 claws and pressure discharge valve assembly to the fuel suction tube assembly with pump.
9. Reassemble the fuel pump with the new Sub-Tank, plate and applicable O-Rings.  
Refer to TIS, applicable model and model year Repair Manual:
  - [2015 / 2016](#) NX 200t:  
*Engine/Hybrid System – Fuel System – “8AR-FTS Fuel: Fuel Pump: Reassembly”*
10. Install the fuel pump assembly into the fuel tank.  
Refer to TIS, applicable model and model year Repair Manual:
  - [2015 / 2016](#) NX 200t:  
*Engine/Hybrid System – Fuel System – “8AR-FTS Fuel: Fuel Pump: Installation”*
11. Install the fuel tank assembly.  
Refer to TIS, applicable model and model year Repair Manual:
  - [2015 / 2016](#) NX 200t:  
*Engine/Hybrid System – Fuel System – “8AR-FTS Fuel: Fuel Tank: Installation”*
12. Complete the Confirmation Driving Pattern to confirm the DTC is no longer present.  
Refer to TIS, applicable model and model year Repair Manual:
  - [2015 / 2016](#) NX 200t:  
*Engine/Hybrid System – Engine Control – “8AR-FTS ENGINE CONTROL: SFI SYSTEM: P125D71”*