

# TECHNICAL BULLETIN

JTB00392NAS1

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NOTE: The information in Technical Bulletins is intended for use by trained, professional Technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these Technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by 'do-it-yourselfers'. If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Jaguar service facility to determine whether this bulletin applies to a specific vehicle.

## **SECTION: 303-14**

Engine MIL Illuminated

### **AFFECTED VEHICLE RANGE:**

#### **XF (X250)**

**Model Year:** 2013-2014

**VIN:** S47999-U88785

**Manufacturing Plant:** Castle Bromwich

**Engine:** V6 S/C 3.0L Petrol

#### **XJ Range (X351)**

**Model Year:** 2013-2014

**VIN:** V34128-V89549

**Manufacturing Plant:** Castle Bromwich

**Engine:** V6 S/C 3.0L Petrol

#### **F-TYPE (X152)**

**Model Year:** 2014-2015

**VIN:** K06417-K22184

**Manufacturing Plant:** Castle Bromwich

**Engine:** V6 S/C 3.0L Petrol

### **MARKETS:**

NAS

### **CONDITION SUMMARY:**

**Situation:** The engine Malfunction Indicator Lamp (MIL) may be illuminated. Upon diagnosis, the technician may find Diagnostic Trouble Codes (DTC) relevant to the Mid-catalyst and Post-catalyst Heated Oxygen sensors (HO2S) -- P0036, P0037, P0038, P0042, P0043, P0044, P0054, P0055, P0056, P0057, P0058, P0060, P0061, P0062, P0063, P0064, P0136, P013A, P013C, P013E, P0141, P0141, P0142, P0143, P0144, P0147, P014A, P0156, P0157, P0158, P0161, P0162, P0163, P0164, and/or P0167 -- stored in the Engine Control Module (ECM).

**Cause:** This may be caused by a Post-catalyst Heated Oxygen sensors (HO2S) software error.

**Action:** Should a customer express this concern, follow the Service Instruction outlined below.

### **PARTS:**

C2D39892	Heated Oxygen sensor - F-TYPE (X152), XF (X250), XJ (X351)	Quantity: 1
C2D23703	Heated Oxygen sensor - F-TYPE (X152), XF (X250), XJ (X351)	Quantity: 1
C2D23702	Heated Oxygen sensor - XF (X250), XJ (X351)	Quantity: 1
C2D27350	Heated Oxygen sensor - XF (X250), XJ (X351)	Quantity: 1
C2D24758	Heated Oxygen sensor - XF (X250), XJ (X351)	Quantity: 1

### **TOOLS:**



**NOTE:** this 'Active Bulletin' will display a functional programming shortcut if accessed within a diagnostic session using SDD.

SDD with latest DVD and Calibration File  
Jaguar Land Rover-approved Midtronics battery power supply

### **WARRANTY:**



**NOTE:** Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to TOPIx to obtain the latest repair time.



**NOTE:** DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.

DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Read and clear Diagnostic Trouble Code(s) DTCs	<b>86.99.78</b>	0.2	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Right bank - Renew - F-TYPE (X152)	<b>18.31.60</b>	1.2	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Left bank - Renew - F-TYPE (X152)	<b>18.31.61</b>	1.1	04	C2D30319
Heated Oxygen sensor (HO2S) - Post-catalyst - Left bank/each - Renew - F-TYPE (X152)	<b>18.31.67</b>	0.3	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Right bank - Renew - XF (X250) RWD	<b>18.31.60</b>	0.6	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Right bank - Renew - XF (X250) AWD	<b>18.31.60</b>	0.6	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Left bank - Renew - XF (X250) RWD	<b>18.31.61</b>	0.6	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Left bank - Renew - XF (X250) AWD	<b>18.31.61</b>	0.5	04	C2D30319
Heated Oxygen sensor (HO2S) - Post-catalyst - Left bank/each - Renew - XF (X250)	<b>18.31.67</b>	0.5	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Right bank - Renew - XJ (X351) RWD	<b>18.31.60</b>	0.6	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Right bank - Renew - XJ (X351) AWD	<b>18.31.60</b>	0.7	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Left bank - Renew - XJ (X351) RWD	<b>18.31.61</b>	0.6	04	C2D30319
Heated Oxygen sensor (HO2S) - Mid-catalyst - Left bank - Renew - XJ (X351) AWD	<b>18.31.61</b>	0.6	04	C2D30319
Heated Oxygen sensor (HO2S) - Post-catalyst - Left bank/each - Renew - XJ (X351)	<b>18.31.67</b>	0.3	04	C2D30319
Configure existing ECM	<b>86.99.26</b>	0.2	04	C2D30319



**NOTE: Normal Warranty procedures apply.**

### **Diagnostic Trouble Code (DTC) Information**

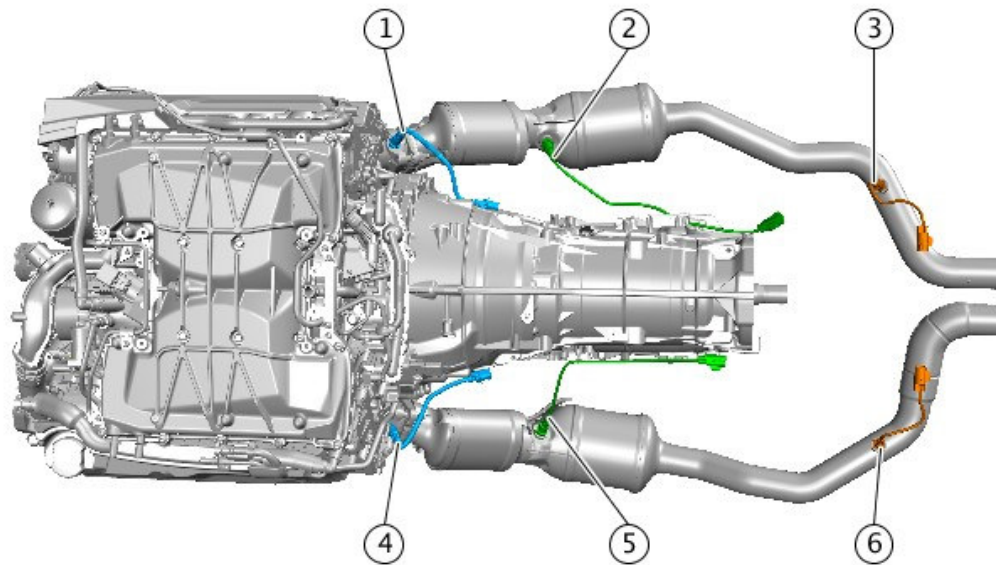
Diagnostic Trouble Code (DTC) Table

Diagnostic Trouble Code (DTC)	Heated Oxygen sensor (HO2S)
P0036, P0037, P0038, P0054, P0136, P013A, P013E, P0141	Mid-catalyst - right bank (Heated Oxygen sensor [HO2S] - Right)
P0042, P0043, P0044, P0055, P0142, P0143, P0144, P0147	Post-catalyst - right bank (Heated Oxygen sensor [HO2S] - Right )
P0056, P0057, P0058, P0060, P013C, P014A, P0156, P0157, P0158, P0161	Mid-catalyst - left bank (Heated Oxygen sensor [HO2S] - Left)
P0062, P0063, P0064, P0162, P0163, P0164, P0167	Post-catalyst - left bank (Heated Oxygen sensor [HO2S] - Left )



**1 NOTE:**  
engine shown viewed from above.

Heated Oxygen Sensor (HO2S) location and designation.



E181489

HO2S	DESCRIPTION	IDENTIFICATION
1	HO2S Heated Oxygen Sensor - Pre catalyst - Bank 1, sensor 1	B1-S1
2	HO2S Heated Oxygen Sensor - Mid catalyst - Bank 1, sensor 2	B1-S2
3	HO2S Heated Oxygen Sensor - Post catalyst - Bank 1, sensor 3	B1-S3
4	HO2S Heated Oxygen Sensor - Pre catalyst - Bank 2, sensor 1	B2-S1
5	HO2S Heated Oxygen Sensor - Mid catalyst - Bank 2, sensor 2	B2-S2
6	HO2S Heated Oxygen Sensor - Post catalyst - Bank 2, sensor 3	B2-S3

### **SERVICE INSTRUCTION:**

**⚠ CAUTION:** a Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle-battery during SDD diagnosis / module programming.

**⚠ CAUTION:** ensure all ignition 'ON' / ignition 'OFF' requests are carried out; failure to perform these steps may cause damage to control modules in the vehicle.

**⚠ NOTE:** SDD must be loaded with DVD142.03 v.212 or later.

1 Connect the Jaguar Land Rover-approved Midtronics battery power supply to the vehicle battery.

2 Turn ignition 'ON' (engine not running).

3 Connect the Symptom Driven Diagnostics (SDD) system to the vehicle and begin a new session.

4 Follow the on-screen prompts, allowing SDD to read the VIN and identify the vehicle and initiating the data collect sequence.

5 Read the Diagnostic Trouble Codes (DTC).

6 **⚠ NOTE:** the Engine Control Module (ECM) may also be referred to as Powertrain Control Module (PCM).



**NOTE: only the affected Heated Oxygen sensor(s) should be replaced as indicated by the Diagnostic Trouble Code(s) (DTC) stored in the Engine Control Module (ECM); refer to Diagnostic Trouble Code (DTC) Table. It is very unlikely for both sensors to fail simultaneously. The new software will prevent any further concerns.**

Refer to Diagnostic Trouble Code (DTC) Table:

- If no listed DTC(s) is stored in the ECM, continue to the next step to update the ECM software.
- If one or more of the listed DTCs is stored in the Engine Control Module (ECM), replace only the relevant Heated Oxygen sensor(s) (HO2S) indicated by the stored DTC (see TOPIX Workshop Manual, section 303-14).
  - Once complete, continue to the next step to update the ECM software.

**7** Turn ignition 'ON' (engine not running).

**8** Select 'Diagnosis' from the Session Type screen.

**9** Select the 'Selected Symptoms' tab, and then select:

- Electrical > Instruments > Warning lamps > Engine malfunction lamp > Lamp illuminated

**10** Select 'continue'.

**11** Select the 'Recommendations' tab, and then select '**Run**' to perform the 'Configure existing module - Powertrain control module' option.

**12** Follow all on-screen instructions to complete this task, ensuring all DTCs are cleared.

**13** Exit the current session.

**14** Disconnect the SDD and the battery power supply from the vehicle.