



MODEL  
ALL

DATE  
29 APR 2008

NUMBER  
JAGA309-001  
(Issue 2)

SERVICE

TECHNICAL BULLETIN

THIS ISSUE REPLACES JAGA309-001, ISSUED 11 SEP 2006.  
CHANGES ARE HIGHLIGHTED IN GRAY.

**SECTION: 309 - EXHAUST SYSTEM**

**Removal of Seized Oxygen (O<sup>2</sup>) Sensors**

**AFFECTED VEHICLE RANGE:**

All VIN: All  
Model Year: All

**CONDITION SUMMARY:**

REMOVING O<sup>2</sup> SENSORS WITH SEIZED THREADS

**CAUTION:** This procedure applies to all O<sup>2</sup> exhaust gas sensors. Oxygen sensor breakaway torque must not exceed 70 Nm (52 lbf-ft). A breakaway torque exceeding 70 Nm (52 lbf-ft) may indicate that the threads have become seized. Damage to the exhaust catalyst threads may occur if breakaway torque application exceeds 70 Nm (52 lbf-ft).

**Situation:** This information only bulletin has been issued to inform Dealers of a procedure to remove any O<sup>2</sup> sensor with seized threads. This method has been developed to minimize damage to the exhaust catalyst threads while attempting to remove any O<sup>2</sup> sensor from an exhaust catalyst where the threads may have become seized.

**Action:** When removing any O<sup>2</sup> sensor, should the breakaway torque exceed **70 Nm (52 lbf-ft)**, refer to the Repair Procedure detailed in this bulletin to remove the O<sup>2</sup> sensor.

**PARTS:**

C2A 1022 or WD40 ..... Penetrating oil Qty as required (shop supply)

**WARRANTY:**

No warranty. Information purposes only.  
Normal warranty policy and procedures apply.

**REPAIR PROCEDURE**

REMOVING AN OXYGEN (O<sup>2</sup>) SENSOR WITH SEIZED THREADS

**CAUTION:** If an O<sup>2</sup> sensor breakaway torque exceeds 70 Nm (52 lbf-ft), do NOT apply additional torque. The threads may have become seized and damage to the catalyst threads may occur with additional torque application.

**WARNING:** Use care to not cut or damage the O<sup>2</sup> sensor electrical connector or attached wiring.

- 1. Disconnect the O<sup>2</sup> sensor electrical connector.

**NOTE:** Upon removal, a 'seized' O<sup>2</sup> sensor may turn 90 - 270° before reaching the breakaway torque threshold.

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 Dealer, do not assume that a condition described affects your vehicle. Contact an authorized Jaguar service facility to determine whether the bulletin applies to a specific vehicle.

2. Using a suitable O<sup>2</sup> sensor socket and torque wrench, attempt to remove the O<sup>2</sup> sensor.
3. If the breakaway torque exceeds **70 Nm (52 lbf-ft)** STOP torque application.

**⚠ CAUTION:** Care should be exercised to minimize the amount of lubricant that is allowed to enter the exhaust system through the sensor hole. Lubricant can contaminate the catalyst.

4. Apply a thin coat of penetrating oil (**C2A 1022** or WD40) along the exposed threaded area.

**△ NOTE:** Turning the O<sup>2</sup> sensor clockwise and then counter-clockwise will help loosen and distribute the lubricant throughout the threads. The back and forth rotations will aid removal of the sensor and minimize potential damage to the catalyst threads. (Figure 1)

5. Turn the O<sup>2</sup> sensor clockwise and counter-clockwise to distribute the lubricant around the threads. (Figure 1)
6. After adequately distributing the lubricant, attempt to remove the O<sup>2</sup> sensor.
7. If the breakaway torque exceeds **70 Nm (52 lbf-ft)**, STOP torque application and allow further time for the lubricant to penetrate the threads.
8. Clean the catalyst pipe threads using a 3/4 inch diameter wire brush (similar to a male battery terminal cleaning brush) to remove any debris.
9. Inspect the catalyst down-pipe threads for any damage and ensure a new sensor can be installed.

**⚠ CAUTION:** A new O<sup>2</sup> sensor must be installed as thread damage and chemical contamination to the O<sup>2</sup> sensor may have occurred during the removal process.

**△ NOTE:** New O<sub>2</sub> sensors come with an anti-seize compound already applied to the threads. If additional anti-seize compound is required, the use of Bostik 'Never Seez®' Pure Nickel Special is recommended. For additional information or procurement, visit: <http://www.neverseezproducts.com/purenickel.htm> for more information.

10. Carefully thread a new O<sup>2</sup> sensor into the catalyst pipe threads and hand-tighten until the sensor gasket is visibly seated on the catalyst pipe flange.
11. Tighten the O<sup>2</sup> sensor to **47.5 Nm (±7.2Nm) [35 lbf-ft (± 5.0 lbf-ft)]**.

Figure 1

