



MODEL
ALL

DATE
01 Sep 2006

NUMBER
JAGA309-001

SERVICE

TECHNICAL BULLETIN

SECTION: 309-00 – EXHAUST SYSTEM

Removal of Seized Oxygen Sensors

AFFECTED VEHICLE RANGE:

All VIN: All
Model Year: All

CONDITION SUMMARY:

REMOVING O₂ SENSORS WITH SEIZED THREADS

⚠ CAUTION: This procedure applies to all O₂ exhaust gas sensors. O₂ 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 Retailers of a procedure to remove any O₂ sensor with seized threads. This method has been developed to minimize damage to the exhaust catalyst threads while attempting to remove any O₂ sensor from an exhaust catalyst where the threads may have become seized.
Action: When removing any O₂ sensor, should the breakaway torque exceed **70 Nm (52 lbf-ft)**, refer to the Repair Procedure detailed in this bulletin to remove the O₂ 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.*

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 the bulletin applies to a specific vehicle.

REPAIR PROCEDURE

REMOVE AN OXYGEN SENSOR WITH SEIZED THREADS

⚠ CAUTION: Do not apply additional torque if an O₂ sensor breakaway torque exceeds 70 Nm (52 lbf-ft). The threads may have become seized and damage to the catalyst threads may occur from additional torque application.

△ NOTE: When removing, an O₂ sensor will probably turn 90-270 degrees before seizing.

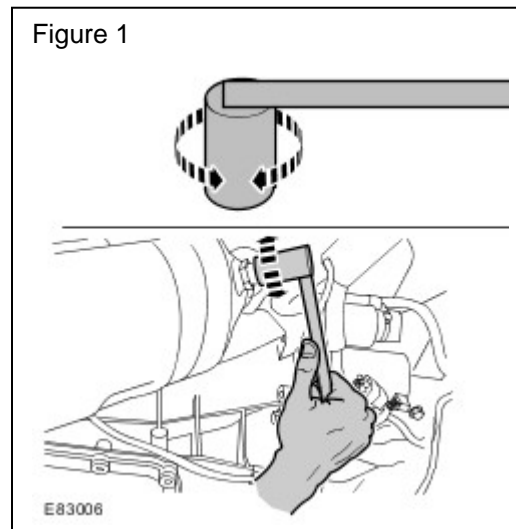
1. When removing an O₂ sensor, if the breakaway torque exceeds **70 Nm (52 lbf-ft)** STOP torque application.
2. Using suitable electrical wire cutters, cut the electrical lead to the O₂ sensor at the top of the sensor.
3. Disconnect and remove the O₂ sensor electrical connector.

⚠ 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 O₂ sensor clockwise and then counter-clockwise will help loosen and distribute the lubricant throughout the threads. The back and forth rotations will aide removal of the sensor and minimize potential damage to the catalyst threads. (Figure 1)

5. Using a suitable socket or ring spanner/wrench (preferably single hex), turn the O₂ sensor clockwise and counter-clockwise to distribute the lubricant around the threads. (Figure 1)
6. After adequately distributing the lubricant, attempt to remove the O₂ sensor.
7. If the breakaway torque exceeds **70 Nm (52 lbf-ft)**, STOP torque application and allow lubricant to penetrate.
8. Once the O₂ sensor has been removed, discard the sensor.
9. Clean the catalyst pipe threads using a ¾ inch diameter wire brush (similar to a male battery terminal cleaning brush) to remove any debris.
10. Inspect the catalyst down-pipe threads for any damage and ensure a new sensor can be installed.



⚠ CAUTION: A new O₂ sensor must be installed. Thread damage and chemical contamination to the O₂ sensor may have occurred during the removal process, even if the O₂ sensor wire did not have to be cut for removal.

11. Carefully thread a new O₂ sensor into the catalyst pipe threads and hand-tighten until the sensor gasket is visibly seated on the catalyst pipe flange.
12. Tighten the O₂ sensor to **47.5 Nm (±7.2Nm) [35 lbf-ft (± 5.0 lbf-ft)]**.