



XJ range

DATE 04/04  
Amended 07/04

XJ310-01

**SERVICE**

# TECHNICAL BULLETIN

## Erratic Fuel Gauge Reading – Fuel Tank Sender – Repair Procedure

MODEL 2004 MY  
XJ range  
VIN XJ G00421-G28859  
XJR G00421-ON

Remove and destroy Bulletin XJ310-01, dated 4/04.  
Replace with this Bulletin.  
Revisions are marked with a bar and in **bold text**.

### Issue:

On some 2004 MY XJ range vehicles within the above VIN range, customers may express concern that the fuel gauge fluctuates, reads erratically or that the low fuel light is on soon after filling the fuel tank. This bulletin outlines a process to determine if there is a fault with the fuel tank senders.

### Action:

In case of a verified customer complaint of the above condition on a 2004 MY XJ range vehicle within the above VIN range, follow the workshop procedure outlined below.

### WORKSHOP PROCEDURE

1. Open driver's door.
2. Use Worldwide Diagnostic System (WDS) to check for DTCs B1202, B1204, B2627, B2628 stored in the instrument cluster and Rear Electronic Module (REM).

**Note:** If any of these DTCs are stored, carry out the associated diagnostic routine and claim as a separate Warranty Claim. Then clear DTCs using WDS.

3. Place instrument cluster into test mode as follows: Press trip button in and hold, turn the ignition 'ON', release the trip button between five and eight seconds after ignition is switched 'ON'.
4. Scroll to RAW1 signal displayed on message center by repeatedly pressing the trip button.
5. Rock vehicle and view reading. A variation in the reading should be seen.

**Note:** A good reading should be between 27 and 240. If 255 is displayed at any time this indicates an open circuit.

6. Scroll to RAW2 signal displayed on message center by pressing the trip button.

**NOTE: THE INFORMATION IN TECHNICAL BULLETINS IS INTENDED FOR USE BY TRAINED, PROFESSIONAL TECHNICIANS WITH THE KNOWLEDGE, TOOLS, AND EQUIPMENT 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." DO NOT ASSUME THAT A CONDITION DESCRIBED AFFECTS YOUR CAR. CONTACT A JAGUAR RETAILER TO DETERMINE WHETHER THE BULLETIN APPLIES TO YOUR VEHICLE.**

7. Rock vehicle and view reading. A variation in the reading should be seen.

**Note:** A good reading should be between 27 and 240. If 255 is displayed at any time this indicates an open circuit.

8. If readouts show faulty sensors, replace both the fuel pump module and the fuel transfer pump to bring the vehicle to the latest specification.

**Note: A new gasket must be installed when replacing the fuel pump module(s) and on N/A vehicles the fuel transfer pump.**

9. If readouts are as expected, remove fuel pump module and fuel transfer pump. Refer to see Workshop Manual, section: 310-01, SRO 19.45.08 and 19.45.21.
10. Place fuel pump module on a clean workbench.
11. Attach a suitable Digital Multi Meter (DMM) (set DMM to resistance/continuity) to sender unit pins.

**Note:** Use adaptors JT006 from the WDS adaptor kit 3548-1358-00 to reduce the possibility of damage to the pins.

12. Slowly sweep the float arm across the full range of the sender to check for open circuit.

**Note:** The readout should gradually increase from 15 ohms to 160 ohms. If high resistance is displayed at any time this indicates an open circuit.

13. Place the fuel transfer pump (NA) or second fuel pump module (SC) on to a clean workbench.
14. Attach a suitable DMM (set DMM to resistance/continuity) to sender unit pins.

**Note:** Use adaptors JT006 from the WDS adaptor kit 3548-1358-00 to reduce the possibility of damage to the pins.

15. Slowly sweep the float arm across the full range of the sender to check for open circuit.

**Note:** The readout should gradually increase from 15 ohms to 160 ohms. If high resistance is displayed at any time this indicates an open circuit.

16. If there is a fault with the sender track resistance, replace both the fuel pump module(s) and the fuel transfer pump (NA) to bring the vehicle to the latest specification.

**Note: A new gasket must be installed when replacing the fuel pump module(s) and on N/A vehicles the fuel transfer pump.**

17. If the track resistance is OK, reinstall the fuel pump module and fuel transfer pump, and ensure that there is a good connection at the electrical connections.  
Refer to see Workshop Manual, section: 310-01, SRO 19.45.08 and 19.45.21.

**Note: A new gasket must be installed when replacing the fuel pump module(s) and on N/A vehicles the fuel transfer pump.**

18. Close driver's door.

**Global Technical Reference (GTR):**

Dealer Access: <https://hub.franchise.jaguar.com>

Internet Access: <http://www.jaguartechno.com>

**Parts Information:**

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Fuel transfer pump (N/A) - VIN G00421-G28859	C2C 24163	1
Fuel pump module (N/A) - VIN G00421-G28859	C2C 24164	1
Fuel pump module (left-hand side SC) - VIN G00421-G27200	C2C 27256	1
Fuel pump module (right-hand side SC) - VIN G00421-G27200	C2C 26898	1
Fuel pump module (left-hand side SC) - VIN G27201-ON	C2C 24166	1
Fuel pump module (right-hand side SC) - VIN G27201-ON	C2C 24165	1
Gasket - All	XR8 5049	2

**Warranty Information:**

Warranty claims should be submitted quoting the information found in the table below. This will result in payment of the stated time and, where applicable parts/miscellaneous expense codes as listed.

Description	SRO	Time	Causal Part Number
Erratic fuel gauge reading service fix (N/A)	88.91.14	2.4 hrs.	C2C 24164
Erratic fuel gauge reading service fix (SC)	88.91.14	2.4 hrs.	C2C 27256