



# TECHNICAL BULLETIN

S310-02

03/2004

## Subject

**Erratic Fuel Gauge Reading**

**Model: S-TYPE (ROW N/A only)**

**Year: 2002.5 to 2004**

**VIN M45255 to N11732**

**Model: S-TYPE (North America N/A only)**

**Year: 2002.5 to 2004**

**VIN M45255 to N11978**

**Section: 310-00**

**Fuel System**

## Summary

This Technical Bulletin has been issued to address customer concerns of an erratic fuel gauge reading.

## Action

Should a customer express concern that the fuel gauge fluctuates, reads erratically or the low fuel light is on soon after filling the fuel tank there could be a fault with the fuel tank sender. Follow the workshop procedure outlined below.

## Workshop Procedure

- 1 Open driver's door.
- 2 Check instrument cluster DTCs.

**Note: Initial check for DTCs (B1202, B1204, B2627, B2628) using Worldwide Diagnostic System (WDS), if codes stored carry out associated diagnostic routine and claim as a separate Warranty Claim. 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 when the test mode is displayed on the message center.
- 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.
- 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 shows faulty sensor; replace the fuel pump module and the fuel transfer pump, (see Global Technical Reference GTR Workshop Manual, section: 310-01).
- 9 If readouts are as expected; remove fuel pump module and fuel transfer pump, (see Global Technical Reference GTR Workshop Manual, section: 310-01).
- 10 Place fuel pump module on to a clean workbench.
- 11 Attach a suitable Digital Multi Meter (DMM) (set DMM to resistance/continuity) to sender unit pins.

**Note: Utilize 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 15ohms to 160ohms. If high resistance is displayed at any time this indicates an open circuit.**

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

**Note: Utilize 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 15ohms to 160ohms. If high resistance is displayed at any time this indicates an open circuit.**

- 16 If there is a fault with the sender track resistance: renew fuel pump module and fuel transfer pump (see Global Technical Reference GTR Workshop Manual, section: 310-01).
- 17 If the track resistance is OK, re-install the fuel pump module and fuel transfer pump (see Global Technical Reference GTR Workshop Manual, section: 310-01), and ensure that there is a good connection at the electrical connections.
- 18 Close driver' s door.

### Parts Information

The following parts must be ordered via Jaguar Cars Parts Operations (or through NSC/Importer).

Description	Part Number	Quantity
Fuel pump module	XR8 49199	1
Transfer pump	XR8 49198	1

### Warranty Information

Description	SRO	Labor Time Allowance	Causal Part
Erratic fuel gauge reading service fix	88 91 14	1.3 Hours	XR8 49199