SB-10057588-6294

TECHNICAL BULLETIN

LTB00566NAS4

10 OCT 2014

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 Land Rover service facility to determine whether this bulletin applies to a specific vehicle.

This reissue replaces all previous versions. Please destroy all previous versions.

Changes are highlighted in gray

SECTION: 310-01

Fuel Gauge Operation Inaccurate

AFFECTED VEHICLE RANGE:

LR4 (LA)
Model Year: 2010-2013
VIN: AA510742-DA656034

LR2 (LF)
Model Year: 2008-2012
VIN: 8H000212-CH292666

Range Rover Sport (LS)
Model Year: 2010-2013
VIN: AA212147-DA790997

Range Rover (LM)
Model Year: 2010-2012
VIN: AA304426-CA369495

MARKETS:

NAS

CONDITION SUMMARY:

Situation: The fuel gauge may be inoperative or inaccurate.

Cause: These issues may be caused by fretting corrosion across the fuel sender harness pins inside the fuel tank.

NOTE: Advise the customer to bring the vehicle in with the fuel tank level below ¼ full.

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

PARTS:

CAUTION: The splice joint connector is specific to this repair and must be used and crimped using special tool 418-116A / YRW500010.

LR050538	Splice joint connector	Quantity: 6
LR000966	Gasket - LR2, LR4, Range Rover Sport	Quantity: 1
ESR3806	Gasket - Range Rover	Quantity: 2

TOOLS:

Crimping pliers
418-116A / YRW500010

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.

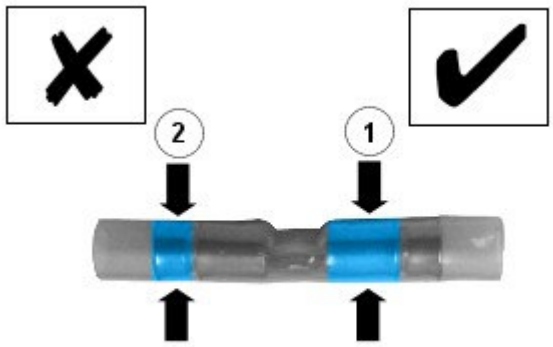
NOTE: DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.

DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Fuel sender harness modification - LR2 (L359)	**88.25.89/35**	2.6	X2	LR038723
Fuel sender harness modification - LR4 (L319)	**88.25.89/35**	1.5	X2	LR042971
Fuel sender harness modification - Range Rover Sport (L320)	**88.25.89/35**	1.5	X2	LR042716
Fuel sender harness modification - Range Rover (L322)	**88.25.89/35**	1.5	X2	LR043153

NOTE: Normal Warranty procedures apply.

SERVICE INSTRUCTION:

1. Remove the fuel pump and sender unit / fuel pump module (see TOPIx Workshop Manual, Section 310-01).
2. Place the fuel pump and sender unit / fuel pump module on a clean work surface.
3. **CAUTION: To reduce the chance of incorrect wiring of the harnesses, wherever possible, only repair one wire at a time.**



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CAUTION: Make sure that the splice is crimped in the correct location.

CAUTION: Make sure that the splice is crimped using special tool 418-116A / YRW500010.

CAUTION: Make sure that the splice with the part number listed above is used. Failure to follow these instructions may result in a poor repair.

NOTE: The number of black connectors shown in the fuel tank on a vehicle may vary from the procedure shown below. To achieve the best possible repair, replace as many of the black connectors (up to three [3 in total) as possible.

NOTE: Some variation in the illustrations may occur, but the essential information is

always correct.

When installing the splices, make sure that the splice is crimped in the correct location.

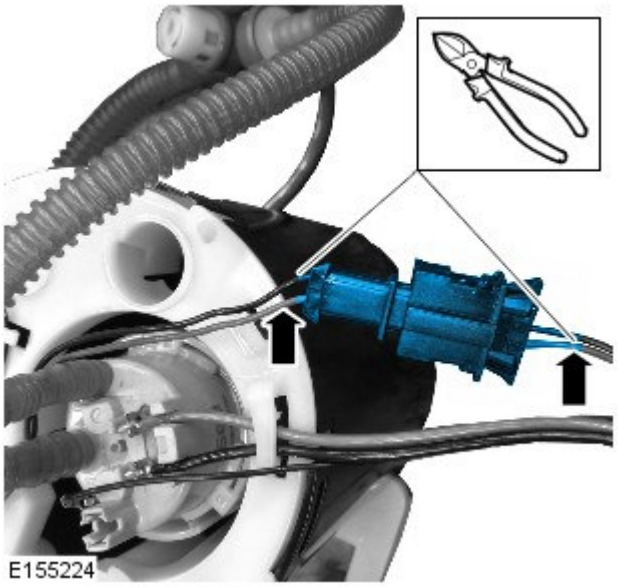
- **'Tick' / '1'** - correct crimp location.
- **'X' / '2'** - incorrect crimp location.

4. **CAUTION: Make sure the wiring is cut as close to the connector as possible.**

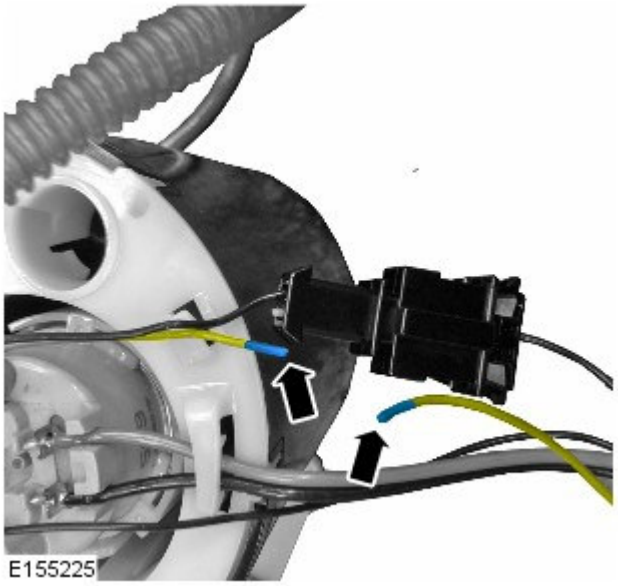
NOTE: A total of three (3) black two-pin connectors may be found. Replace only one at a time.

Identify a black two-pin connector to be removed.

- Cut wiring as close to the connector as possible.

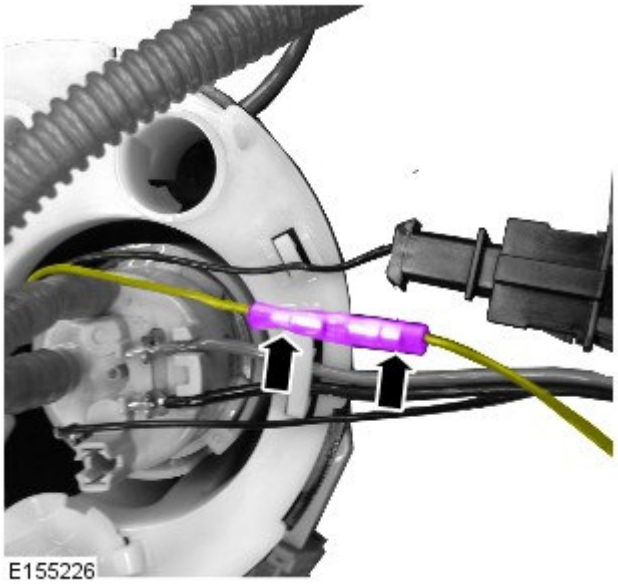


5. Using a suitable tool, remove 5mm of insulation from the end of each wire.



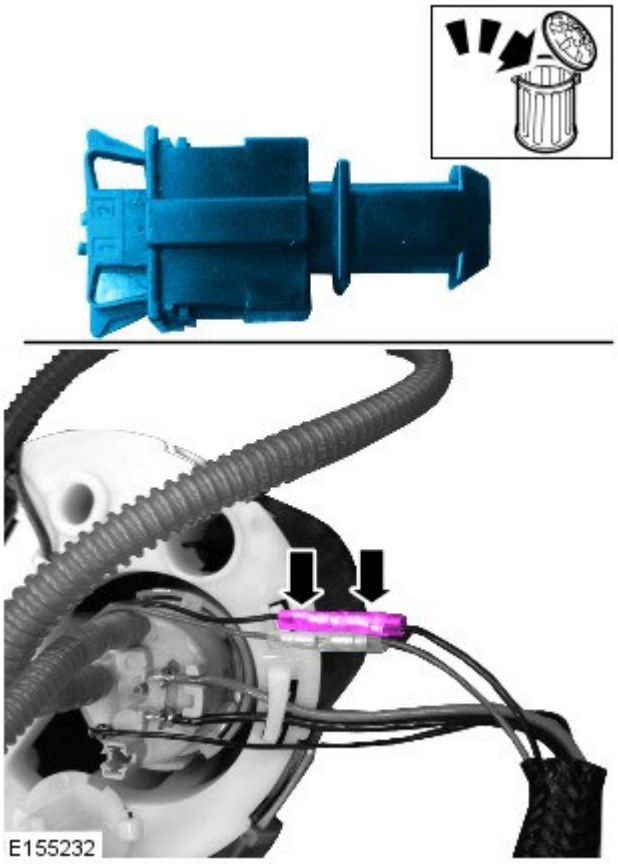
6. **CAUTION: After crimping the connection, perform a gentle pull test to make sure that a sufficiently strong connection has been created. If required, remove and replace the splice.**

Using Crimping Tool 418-116A / YRW500010, install and crimp a splice to the ends of each wire.



7. Repeat steps 5-6 to the other wire in the connector.

- Discard the connector.



8. Repeat steps 4-7 to all black two-pin connectors (up to three [3] in total).

9. Using a suitable tie strap, secure the two splices together.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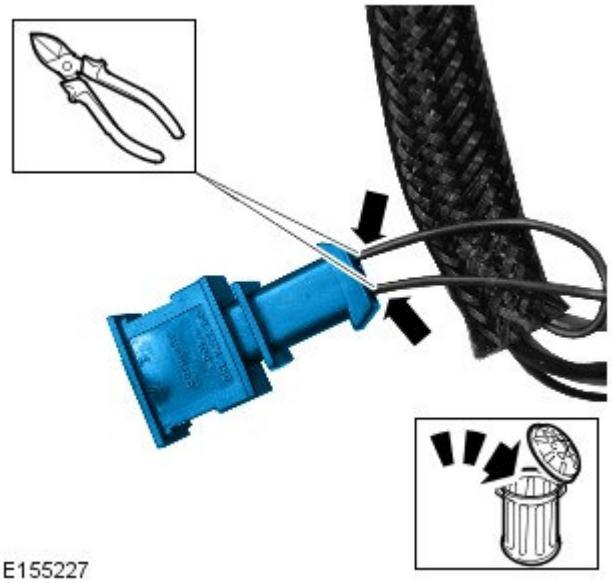
10. **CAUTION: Make sure the wiring is cut as close to the connector as possible.**

Identify the ground connector (two black wires) to be removed.

- Cut wiring as close to the connector as possible.
- Discard the connector.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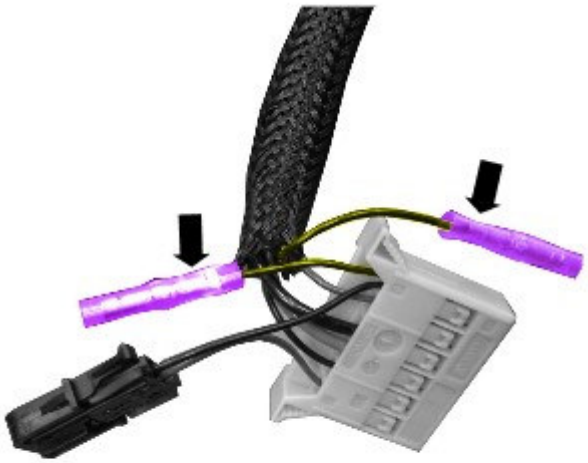
11. Using a suitable tool, remove 5mm of insulation from the end of each wire.

12. **NOTE: Do not connect the two splices until step 16.**

Using Crimping Tool 418-116A / YRW500010, install and crimp a splice to the end of each wire.



E155228

13. **CAUTION: Do not install the fuel tank flange at this point.**

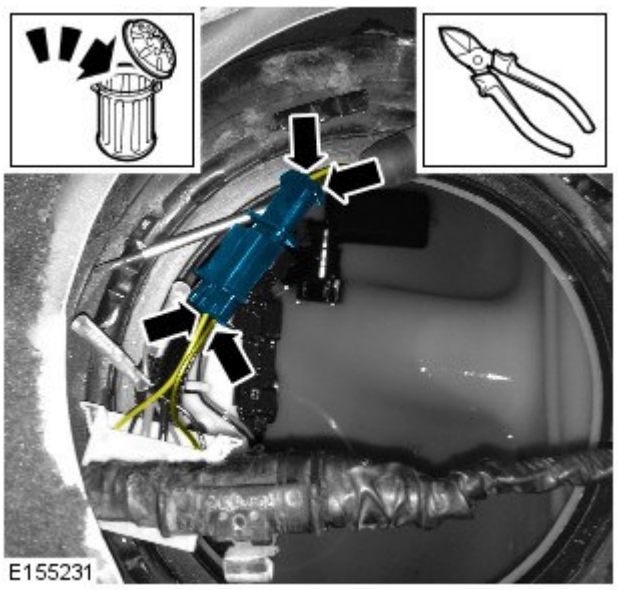
Install the fuel pump and sender unit / fuel pump module into the fuel tank (see TOPIx Workshop Manual, Section 310-01).

14. **CAUTION: Make sure the wiring is cut as close to the connector as possible.**

CAUTION: Make sure that the correct wires are re-connected to each other.

Identify the connector to be removed.

- Carefully withdraw the connector out of the tank.
- Cut the wires shown as close to the connector as possible.
- Discard the connector.



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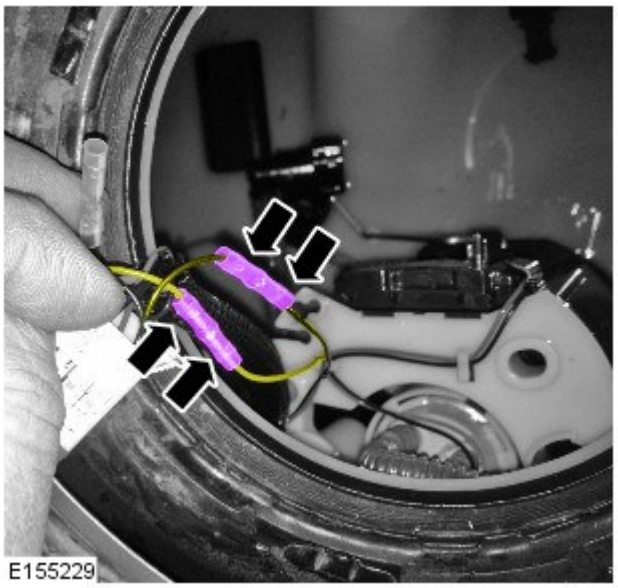
15. **CAUTION: After crimping the connection, perform a gentle pull test to make sure that a sufficiently strong connection has been created. If required, remove and replace the splice.**

Using a suitable tool, remove 5mm of insulation from the end of each wire.

- Using Crimping Tool 418-116A / YRW500010, install and crimp a splice to the ends of each

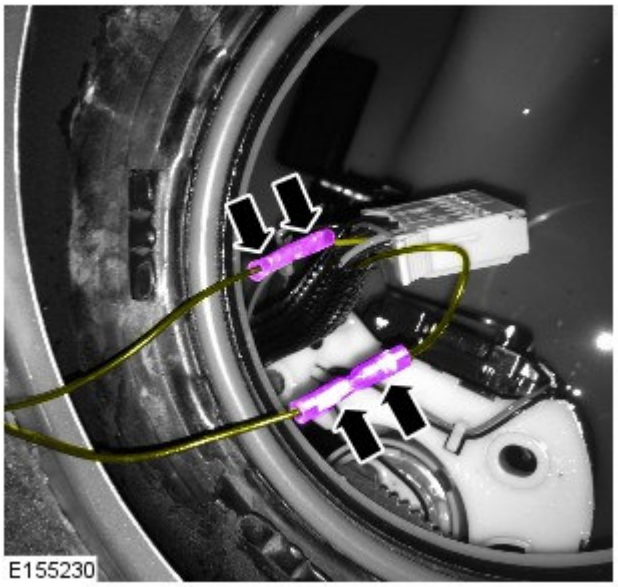
wire.
- Using a suitable tie strap, secure the two splices together.


E155229

16. **CAUTION: After crimping the connection, perform a gentle pull test to make sure that a sufficiently strong connection has been created. If required, remove and replace the splice.**

Connect the two ground wires from the base of the fuel tank flange to the two splices installed in step 12.

- Position the fuel tank flange close to the fuel tank.
- Using a suitable tool, remove 5mm of insulation from the end of each wire.
- Using Crimping Tool 418-116A / YRW500010, install and crimp a splice to the ends of each wire.
- Using a suitable tie strap, secure the two splices together.


E155230

17. Measure the resistance values of the fuel gauge sending units.

- Compare the resistance values obtained to the Resistance Values Checks chart below.

  • If the resistance values are correct, continue to the next step.

  • If the resistance values are not correct, further diagnosis is required. Must be performed as a separate claim.

18. **CAUTION: A successful resistance values check (step 17) must be carried out before continuing to install the fuel pump and sender unit / fuel pump module.**

Complete the installation of the fuel pump and sender unit / fuel pump module (see TOPIx Workshop Manual, Section 310-01).

19. Read and clear all Diagnostic Trouble Codes (DTC).

Resistance Values Checks

Check No.	Pin No.		Lower Resistance Value (Ohms)	Upper Resistance Value (Ohms)
1	1	2	46.2	1002.2
2	1	6	46.2	1002.2