

TECHNICAL BULLETIN  
LTB00542NAS2  
27 AUG 2015



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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: 204-04**

Tire Pressure Monitoring System - Improved Diagnostics and Service Information

**AFFECTED VEHICLE RANGE:**

**LR2 (LF)**

**Model Year:** 2008-2015  
**VIN:** 000212-439912  
**Manufacturing Plant:** Halewood

**LR4 (LA)**

**Model Year:** 2010 Onwards  
**VIN:** 510742 Onwards  
**Manufacturing Plant:** Solihull

**Range Rover Evoque (LV)**

**Model Year:** 2012 Onwards  
**VIN:** 000447 Onwards  
**Manufacturing Plant:** Halewood

**Range Rover Sport (LW)**

**Model Year:** 2014 Onwards  
**VIN:** 000002 Onwards  
**Manufacturing Plant:** Solihull

**Range Rover (LG)**

**Model Year:** 2013 Onwards  
**VIN:** 001204 Onwards  
**Manufacturing Plant:** Solihull

**Range Rover Sport (LS)**

**Model Year:** 2010-2013  
**VIN:** 212147-814822  
**Manufacturing Plant:** Solihull

**Range Rover (LM)**

**Model Year:** 2010-2012  
**VIN:** 304426-363639  
**Manufacturing Plant:** Solihull

**MARKETS:**

NAS

**CONDITION SUMMARY:**

**Situation:** A Tire Pressure Monitoring System (TPMS) fault may be displayed in the Instrument Cluster (IC) and Diagnostic Trouble Codes (DTC) are stored.

**Cause:** This may be caused by various issues.

**Action:** Should a customer express this concern, refer to the Service Tips outlined below. From IDS-DVD133.04 v130, new Symptom and DTC mapping is available. A new diagnostic function, 'Tire Pressure Monitoring Wheel Sensor Test' (see illustrations), must be used when required and directed to by SDD or TOPIX.

### **PARTS:**


No Parts Required

### **TOOLS:**

SDD with latest SDD-DVD and Calibration File  
Jaguar Land Rover-approved Midtronics Battery Power Supply

### **SERVICE TIPS:**

1.  **NOTE: normal Warranty policies and procedures apply.**

 **NOTE: it is important to differentiate between a true fault and a low pressure warning when initially speaking with the customer upon vehicle presentation to service. Low air pressure warnings do not flag a Diagnostic Trouble Code (DTC) and are simply an indication of the intended function of the Tire Pressure Monitoring System (TPMS).**

 **NOTE: the following information is presented as guidance to retailers. It is based on experience learned from warranty data and Electronic Product Quality Reports (EPQR). This is not a comprehensive list of failure modes, nor does it suggest deviation from the normal course of diagnostics via the Symptom Driven Diagnostics (SDD) tool.**

New Symptom and Diagnostic Trouble Code (DTC) mapping is available with the revised diagnostics introduced on IDS-DVD133.04 v.130. Additionally, a new diagnostic function (Tire Pressure Monitoring Wheel Sensor Test [see examples 1-4]) which should be used when required and directed by the help text from the Symptom Driven Diagnostics (SDD) tool or TOPIX, has been released to lessen the time necessary to diagnose a wheel/tire assembly requiring attention. System Fault Warnings can no longer be present without the presence of a DTC; therefore, help will always be available via SDD if there is a true system fault rather than a simple low air pressure warning (which is not a fault).

- **Integrated Tire Pressure Monitoring System diagnostics** for 2014MY-onwards vehicles.
- **Tire Pressure Monitoring System wheel sensor test** for all applications with the Integrated Tire Pressure Monitoring System (TPMS)

2. The new service diagnostic functions will improve the time taken and accuracy in the diagnosis of TPMS issues. It is advised to interrogate one of the following symptoms in SDD:

- Electrical > Instruments > Warning lamps > TPMS lamp illuminated:
  - TPMS Warning Lamp permanently ON for 20 seconds at ignition ON and then goes OFF.
  - TPMS Warning Lamp permanently ON at ignition ON.
  - TPMS Warning Lamp flashes for 75 seconds at ignition ON and then stays permanently ON.

3. SDD screen example 1:

Snapshot Viewer - Windows Internet Explorer

### C1D21-05 Snapshot record: 16

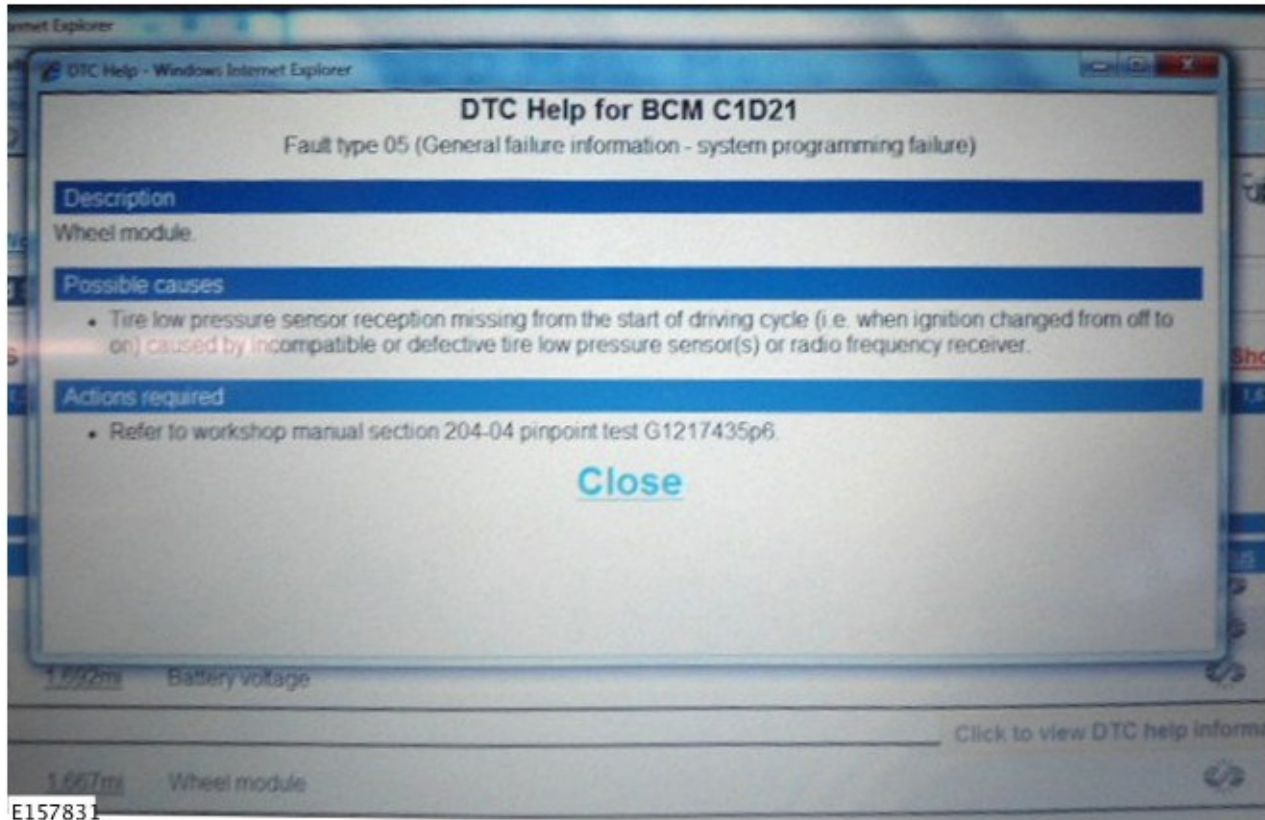
Trigger event - The first time since the DTC information was cleared (including as a result of memory overflow), or the DTC was aged, that a system malfunction (resulting in status bit 3 being set) was detected.

Description	Reading
Sample 1	
Global real time	401.2519h
Total distance	1668.5mi
Main engine control module voltage supply	14.8V
In-car temperature	62.6°F
External temperature	55.4°F
Power mode - power mode	Running
Power mode - power mode quality factor	Power mode OK
Number of missing tire pressure wheel units	4
Engine RPM	1150rpm
Vehicle speed	40.0kph

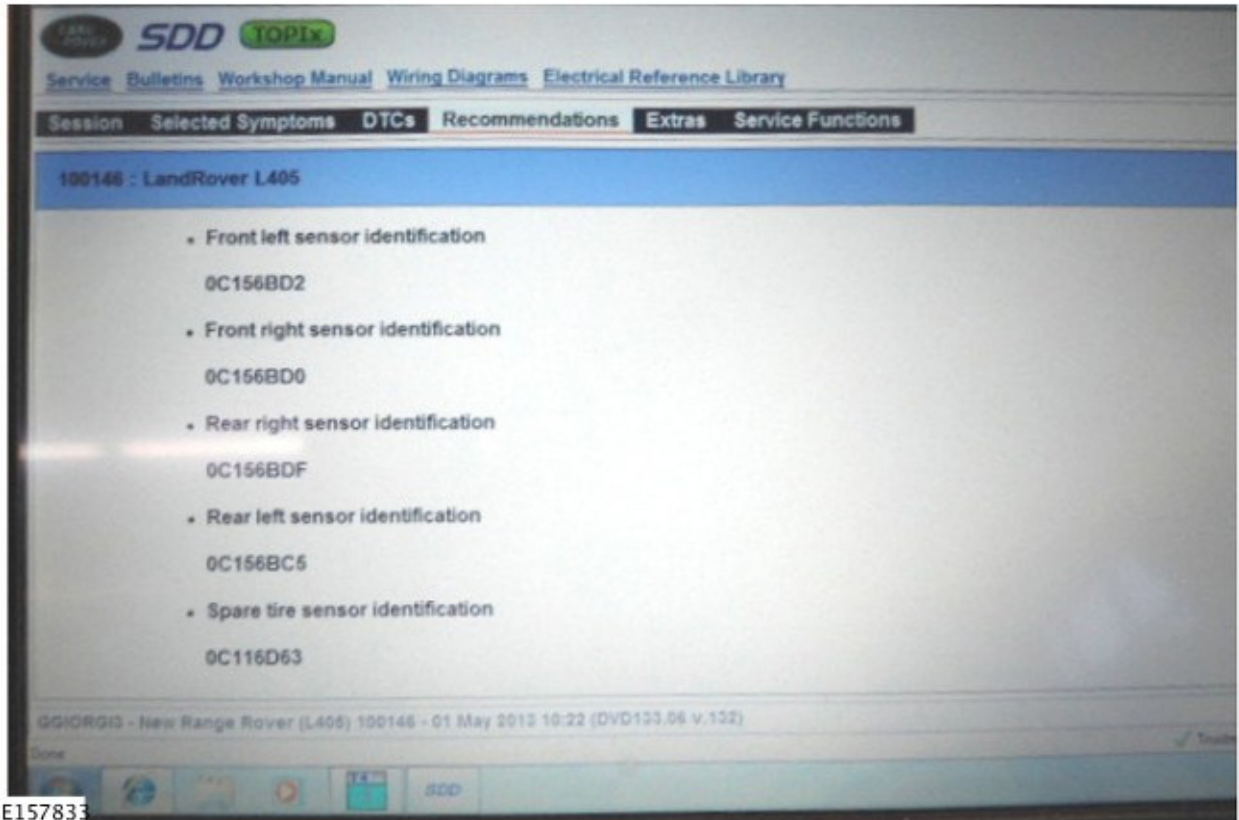
[Close](#)

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#### 4. SDD screen example 2:

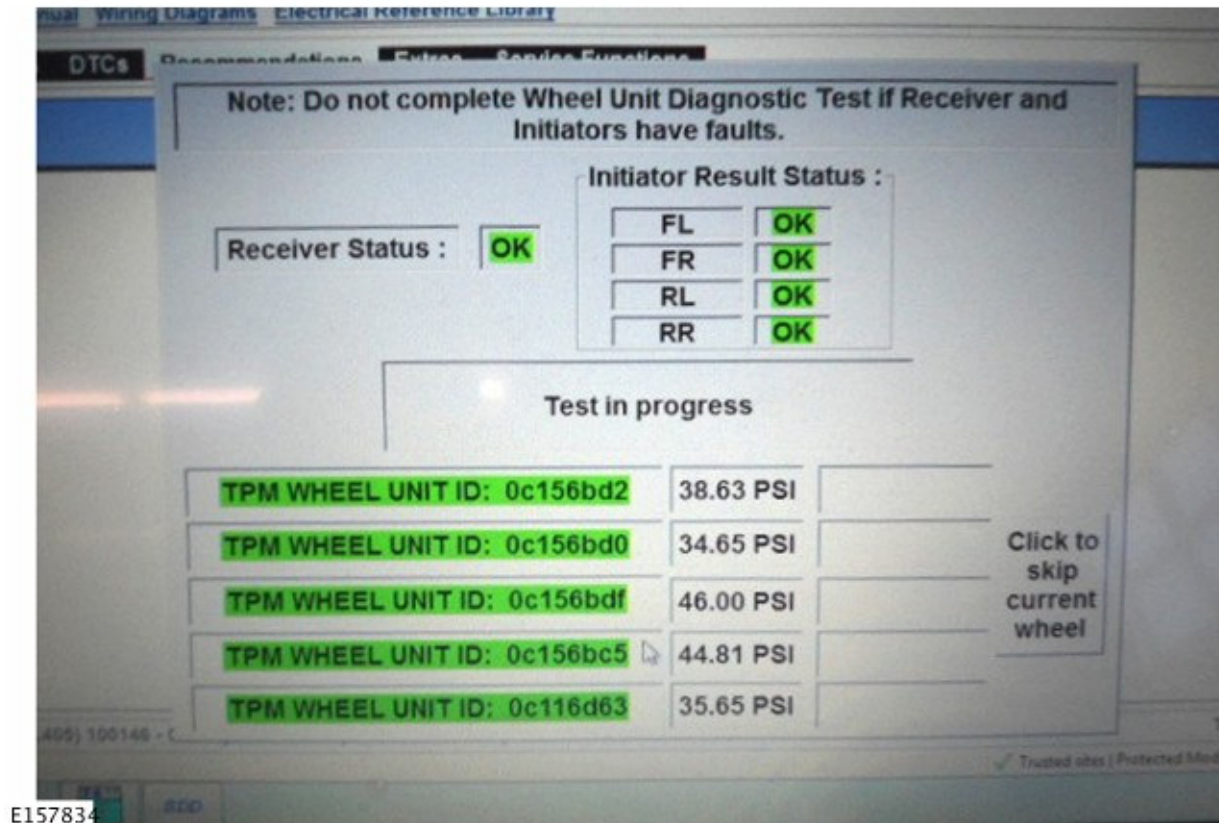


5. SDD screen example 3:



6. SDD screen example 4:





7. **NOTE: The bulletin VIN ranges refer to the revised diagnostics, not service parts applicability. Always check current parts catalog for current part number / model applicability.**

**NOTE: Due to running changes and the possible completion of Technical Bulletins or other repairs, it is possible to encounter a vehicle which has a mix of both types of sensors (serviceable and non-serviceable stem-type sensors). This is not an issue and the vehicle should be serviced accordingly.**

**Service parts:** service kits are available which allow for lower level repairs (valve stem kits versus entire sensor assemblies). These are in vehicle kits with an economic advantage to encourage improved servicing of the sensor valve stem at time when customer is replacing worn tires. These kits are available in both single-piece (to service one [1] wheel) and multi-piece (to service five [5] wheels) packaging. Consult the parts catalog for model and part availability. It is recognized that lack of servicing is leading to the reduced life of the valve. If a leak occurs between the valve stem and the sensor seat in the wheel, the repair should be made using the standard valve stem service kit if available for that sensor. Some photos of available lower-level parts are included here for guidance as to what is available for the two types of sensors where service kits are now available. Please refer to illustrations and consult the parts catalog for appropriate part number / model applicability.

8. **Use of incorrect part number sensors / kits:** when fitting new sensors, ensure the correct part number is used. Similar looking sensors can be different; use of the incorrect part number may lead to further issues with the TPMS.

9. **TG1B Sensor** - non-serviceable valve stem

- Part number LR031713; currently fits:
  - LR4 (L319)
  - Range Rover Evoque (L538)
  - Range Rover Sport (L494)
  - Range Rover (L405)

- Range Rover Sport (L320, 2010-2013MY)
- Range Rover (L322, 2010-2012MY)



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**10. TG1B Service kit** - hardware and seals only; no valve stem

- Part number LR032879; currently fits:
  - LR4 (L319)
  - Range Rover Evoque (L538)
  - Range Rover Sport (L494)
  - Range Rover (L405)
  - Range Rover Sport (L320, 2010-2013MY)
  - Range Rover (L322, 2010-2012MY)



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**11. TG1C Sensor** - serviceable valve stem

- Part number LR032833; currently fits:
  - LR2 (L359, 2010MY+)



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**12. TG1C Service kit** - hardware and seals **only**; no valve stem

- Part number LR032865; currently fits:
  - LR2 (L359, 2010MY+)



**13. TG1C Service kit** - hardware, seals, and valve stem

- Part number LR032834; currently fits:
  - LR2 (L359, 2010MY+)



**14. Damaged valve stems at tire change:** Often wheel units can become damaged during routine tire replacements. The damage to the sensor housing is usually clearly visible. Additionally, over torque of the mounting nut can also result in housing failure. Clear instructions are available in TOPIX to ensure mounting and dismounting can be completed without damage to the sensor unit.

**15. Incorrect valve core replacement:** Only the cores supplied in the valve and those in the valve service kits should be used in a TPMS valve as they have the correct metallic content for compatibility with the valve stem. Additionally, metallic valve stem caps should never be used as they can corrode to the threads of the valve stem and become difficult to remove.

**16. Excessive side loading of valve stem while filling:** The valve stem should not be excessively side-loaded while filling with air, this can cause it to snap. In the instance of the TG1C style valve, the stem can be replaced without needing a complete e the stem without replacing the complete sensor unit.



**17. Incorrect use of Technical Bulletin LT00376:** It is vital this bulletin is accurately followed and in particular the diagnostic check to ensure that the specified DTC has been set and is in isolation to any other DTCs.