Reference	SSM64917
Models	Range Rover / L405
Title	Dynamic Response System DTCs and bleed procedure
Category	Chassis
Last modified	10-Jul-2017 00:00:00
Symptom	304000 Suspension System

## Content Issue:

Dynamic Response fluid leaking from the reservoir cap and / or suspension fault warning on the Instrument Pack with the following Diagnostic Trouble Codes (DTCs) C1119-09, C1B11-62, C1046-91, C104A-94, C104B-94, C104C-94, C1049-94 stored in the Dynamic Response Control Module (DRCM).

Claims are being received where ARC system components (reservoir, reservoir cap, reservoir suction hose, reservoir return hose and DRS Valve block) are being replaced, when a manual bleed should resolve the issue.

## Cause:

An air lock in the Dynamic Response System (DRS) hydraulic circuit can cause fluid overflow through the reservoir or could generate the above fault codes.

Potentially the system has not been filled correctly and sucked in air.

When the vehicle is running, system pressures compress any trapped air. A symptom of this is the fluid level being low when the engine is running. When the engine is switched off the air trapped in the primary system expands and the reservoir overflows.

## Action:

Where there is evidence of fluid leaking from the reservoir, or the above DTCs are stored in the DRCM, before carrying out electrical continuity checks and consideration to component replacement please carry out a thorough DRS system bleed procedure as follows, with reference to the updated bleed procedure in TOPIx (20406 Ride and Handling Optimization) and the 'Dynamic Response System Hydraulic Self Test' using Symptom Driven Diagnostics (SDD).

- 1. Perform an Active Stabilization System Fluid Level Check as described in the workshop manual. A significant drop in fluid indicates trapped air in the system.
- 2. Via selected symptoms, select 'Chassis/Suspension/Vehicle Dynamic Suspension.
- 3. From the Recommendations menu run the 'Dynamic response module Dynamic response hydraulic control-system test'.
- 4. Run test and view overall result, click on pass button for SCV and bleed tests to view the numeric data.
- 5. If any of the SVS response times (second row only) exceed 0.140 seconds then carry out a further system bleed to reduce the response times.
- 6. Check the system for leaks.
- 7. Perform a manual bleed on the DRS system as described in the workshop manual Active Stabilization System Bleeding. This should remove trapped air and may remove contamination.
- 8. If contamination is detected please raise an EPQR and submit photographic evidence of the contamination.
- 9. Repeat steps 1-5.

If the DTCs return following DTC read / clear and vehicle assessment, continue with further diagnosis with reference to SDD and TOPIx.

Technicians - Please rate this SSM and provide comments so that future communications can be improved.

- 1 = Poor Basic information provided The SSM does not help me resolve the customer concern.
- 3 = Average Adequate information provided The SSM partially helps me resolve the customer concern.
- 5 = Excellent All required information provided to resolve the customer concern.