# TECHNICAL BULLETIN LTB00241NAS5 05 MAR 2013



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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. Only refer to the electronic version of this TSB in TOPIx.

Changes are highlighted in gray

**SECTION: 204-01** 

Front Suspension 'Knock' Noise Improvement

### **AFFECTED VEHICLE RANGE:**

Range Rover Sport (LS) - with Model Year: 2007-2011

Dynamic Response™ only VIN: 7A983118-BA716646

# <u>MARKETS:</u>

NAS

# **CONDITION SUMMARY:**

#### Situation:

Vehicles with Dynamic Response<sup>™</sup> may exhibit a 'knock' noise from the front suspension while driving straight on rough / uneven road surfaces.

NOTE: For vehicles within the VIN range 7A983118-8A122778 exhibiting a steering column knock' noise, refer to Technical Bulletin LTB00097NAS.

NOTE: For vehicles exhibiting a 'knock' noise while driving straight ahead, the Repair Procedure outlined below must be carried out first.

igtriangleNOTE: For vehicles exhibiting a 'thud' noise, refer to Technical Bulletin LTB00198NAS.

NOTE: For vehicles without Dynamic Response™, refer to Technical Bulletin LTB00123NAS.

**Cause:** This may be caused by noise transmission into the vehicle cabin of impulses inherent to the suspension system

Action: In the event of a customer concern of the above, refer to the Repair Procedure outlined below.

# PARTS:

LR023280	Mass absorber kit (up to VIN AA239882)	Quantity: 1
LR031369	Dynamic Response $^{\text{TM}}$ bush clamp - front (as necessary)	Quantity: 2
RVU500011	Dynamic Response™ bush - front	Quantity: 2
RYP501110	Clamp bolt	Quantity: 2

RYP501120 Clamp bolt

Quantity: 4

### **TOOLS:**

Refer to Workshop Manual for any required special tools.

# **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
Install Mass absorber kit	77.10.89/29	0.20	33	RVU500011
Mounting rubbers - anti roll bar - ACE - set - replace	60.60.47	1.00	33	RVU500011

NOTE: Normal Warranty policies and procedures apply.

# **REPAIR PROCEDURE:**

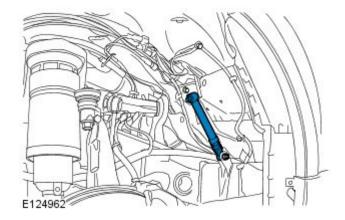
NOTE: The majority of knocks can be heard at approximately 25 mph (40 kph) on rough roads or over single-wheel inputs / shock. It is important to identify a test route that highlights the customer concern of suspension knock and re-test the vehicle over the same test route when identified in the following procedure. The test route should include roads that have a broken road surface or drain covers that allow single-wheel inputs, etc. The vehicle speed that highlights the issue should be noted during the initial appraisal of the customer concern and then replicated on subsequent test drives.

- 1. Raise vehicle on a suitable ramp (TOPIx Workshop Manual section 100-02).
- Identify if body mount dampers are installed to the vehicle.
  - Reposition the road wheel to gain access to splash shield top grommet ('1').
  - Remove splash shield top grommet.

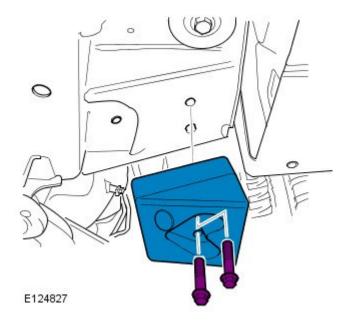


 NOTE: Front left-hand body mount damper shown with splash shield removed for clarity; right-hand body mount damper similar. If installed, remove and discard the body mount damper.

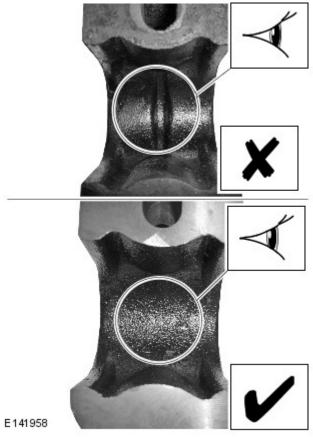
• Install the splash shield top grommet.



- **4.** If no mass absorber is installed, install the mass absorber.
  - Clean the underside of the second body mount carrier (located slightly rearward of the front wheel) to remove any contamination.
  - Install a mass absorber to the second body mount carrier using the two bolts per mass absorber provided in the mass absorber kit. Keep the lower face of the mass absorber parallel with the ground.
  - Tighten bolts to 115 Nm (85 lbf ft).



- **5.** If required, carry out steps 2-4 to the opposite side of the vehicle.
- **6.** Remove the front stabilizer bar bushing (TOPIx Workshop Manual section 204-06).
  - Inspect the Dynamic Response™ bush clamps.
  - If the old-design Dynamic Response™ bush clamps are installed (with internal ridge), discard the Dynamic Response™ bush clamps and install the new-design Dynamic Response™ bush clamps (no internal ridge) in step 8.
  - If the new-design Dynamic Response<sup>™</sup> bush clamps are installed (no internal ridge), re-use the Dynamic Response<sup>™</sup> bush clamps in step 8.

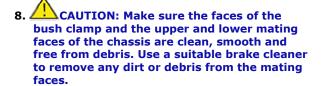


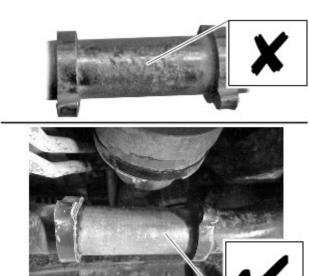
7. CAUTION: Make sure that the stabilizer bar is cleaned back to the paint but do not remove the paint.

CAUTION: The paint on the stabilizer bar may have worn away; this is an acceptable condition. Do not install a new stabilizer bar for this issue.

Inspect the condition of the front stabilizer bar.

- Remove any dirt or debris from the section of the stabilizer bar that is clamped in the bush.
  Paint, if present, does not need to be removed.
- If required, use a suitable strip of 320 grade abrasive paper/cloth to remove any built-up deposits. Use a suitable brake cleaner to remove any dirt or grease residue.

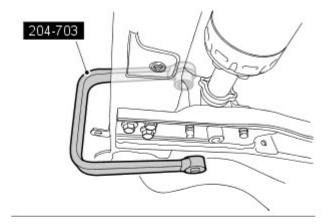


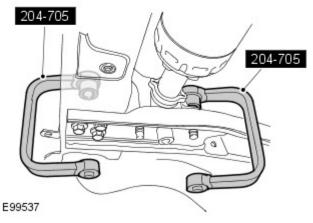


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CAUTION: Make sure that the new design Dynamic Response™ bush clamps are installed (see step 6).

Install the front stabilizer bar bushing and, if necessary, new-design Dynamic Response  $^{\text{TM}}$  bush clamps (TOPIx Workshop Manual section 204-06).





9. Road test the vehicle. If the 'knock' is still evident, carry out Technical Bulletin LTB00204.