TECHNICAL BULLETIN No: LTB00400 (ISSUE 1) 30 AUG 2011		RANGE Rover		LAND= -ROVER	
	IRCULATE TO:	SERVICE ✓	PARTS ✓	WARRANTY ✓	BODY SHOP
<u>section: 211</u> Steering V	Vheel Shim	nmy / Vibrati	ion While Dr	iving	

	-	
AFFECTED	VEHICLE RANGE:	

LR4 (LA)

VIN: AA510742 - BA555717 Model Year: 2010 - 2011 VIN: AA212147 - BA267671 Model Year: 2010 - 2011

Range Rover Sport (LS)

CONDITION SUMMARY:

Situation: The steering wheel may exhibit a shimmy / vibration while driving at highway speeds. This may be evident with or without brake system application.

NOTE: Ensure the vehicle is to original specification (wheels, tires) prior to performing the Repair Procedure outlined below. Refer to Technical Bulletin LTB00401, *Tire / Wheel Balancing and Optimization*, for wheel balancing information prior to performing the Repair Procedure outlined below.

Action: In the event of a customer concern of the above, refer to the chart and perform the appropriate Repair Procedure(s).

<u>PARTS</u>:

NOTE: Range Rover Sport only -- as non-heated steering wheels are no longer available, heated steering wheels replace non-heated steering wheels; however, the heated function will <u>not</u> be functional if not originally fitted on the vehicle.

LR031744Steering gear - Range R	over Sport	Qty: 1
LR025794Steering gear - LR4		Qty: 1
LR025986Lower arm hydra-bush -	- LR4, Range Rover Sport	Qty: 2
LR024056Steering wheel - LR4 - E	bony	Qty: 1
LR023953Steering wheel - Range	Rover Sport - Ebony	Qty: 1
LR023954Steering wheel - Range	Rover Sport - Ebony / Tan	Qty: 1
LR023955Steering wheel - Range	Rover Sport - Ebony / Pimento	Qty: 1
LR023958Steering wheel - Range	Rover Sport - Ebony + Paddle-shift	Qty: 1
LR023959Steering wheel - Range	Rover Sport - Ebony / Tan + Paddle-shift	Qty: 1
	Rover Sport - Ebony / Pimento + Paddle-shift	Qty: 1

<u>TOOLS</u>:

Refer to Workshop Manual for any required special tools

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.

<u>WARRANTY</u>:

△ 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 DDW to obtain the latest repair time.

DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero (0).

LR4 VIN RANGE	COMPONENTS TO BE REPLACED			
LR4 VIN KANGE	LOWER ARM HYDRA-BUSH	STEERING GEAR	STEERING WHEEL	
AA510742 - BA550987	✓	\checkmark	\checkmark	
BA550988 - BA551693		\checkmark	\checkmark	
BA551694 - BA555717			\checkmark	

RANGE ROVER SPORT	COMPONENTS TO BE REPLACED			
VIN RANGE	Lower Arm Hydra-bush	STEERING GEAR	STEERING WHEEL	
AA212147 - BA262114	✓	\checkmark	\checkmark	
BA262115 - BA265552		\checkmark	\checkmark	
BA265553 - BA267671			\checkmark	

DESCRIPTION	SRO	Тіме (Hours)	CONDITION CODE	CAUSAL PART
Steering wheel - renew LR4 - all	57.61.01	0.30		
Hydra-bush lower control arm - vehicle set - renew LR4 - AA510742 - BA550987 only	60.35.36	1.30		
Steering gear - renew LR4 - AA510742 - BA551693 only	57.10.01	0.90		
Steering wheel - renew Range Rover Sport - all	57.61.01	0.40	D9	QEB500640
Hydra-bush lower control arm - vehicle set - renew Range Rover Sport - AA212147 - BA262114 only	60.35.36	1.40		
Steering gear - renew Range Rover Sport - AA212147 - BA265552 only	57.10.01	1.00		
Front wheel alignment	57.65.01	1.10		

Normal Warranty policies and procedures apply

REPAIR PROCEDURE

BALANCE ROAD WHEEL / TIRE ASSEMBLIES

LR4: ALL

RANGE ROVER SPORT: ALL

→ NOTE: Wheel / tire assembly balancing and optimization must be completed before renewing the lower arm bushing, steering gear assembly, and steering wheel.

1. Refer to Workshop Manual, section 204-04: *Wheels and Tires*, <u>and</u> Technical Bulletin LTB00401, *Tire / Wheel Balancing and Optimization*, and balance and optimize the road wheels and tires. To be carried out as a separate claim.

INSTALL LEFT AND RIGHT FRONT SUSPENSION LOWER ARM REAR HYDRA-BUSHES -LR4: AA510742 - BA550987 ONLY RANGE ROVER SPORT: AA212147 - BA262114 ONLY

NOTE: Ensure the vehicle is at Standard Ride Height before the front lower suspension arm fixings are torqued.

NOTE: Wheel / tire assembly balancing and optimization must be completed before renewing the lower arm bushing, steering gear assembly, and steering wheel.

- 1. Refer to Workshop Manual, section 204-01: *Front Suspension,* and remove the left-hand (LH) front suspension lower arm rear bushing (steps 1-13, 16-17 only).
- 2. Refer to Workshop Manual, section 204-01: *Front Suspension*, and install the LH front suspension lower arm rear hydra-bush (steps 1-2, 5 -12 only).
- 3. Repeat steps 1-2 to the right-hand (RH) front suspension lower arm rear bushing.

REPLACE STEERING GEAR ASSEMBLY

LR4: AA510742 - BA551693 ONLY RANGE ROVER SPORT: AA212147 - BA265552 ONLY

NOTE: The new steering gear may be equipped with outer tie rod ends. If so, discard and re-use the originally-fitted outer tie rod ends.

NOTE: After replacing the steering gear, the customer may notice that the steering feels 'heavier'; this is normal.

NOTE: Wheel / tire assembly balancing and optimization must be completed before renewing the lower arm bushing, steering gear assembly, and steering wheel.

1. Refer to Workshop Manual, section 211-02: Power Steering, and replace the steering gear.

REPLACE STEERING WHEEL

LR4: ALL RANGE ROVER SPORT: ALL

NOTE: Wheel / tire assembly balancing and optimization must be completed before renewing the lower arm bushing, steering gear assembly, and steering wheel.

1. Refer to Workshop Manual, section 211-04: Steering Column, and replace the steering wheel.