TECHNICAL BULLETIN

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CIRCULATE: TO	Service Mgr	Warranty	Workshop	Body Shop	Parts
	X	X	X	X	X

THIS BULLETIN SUPERCEDES LTB00097 ISSUE 2, DATED 12 DEC 2007.
THE CHANGES ARE HIGHLIGHTED IN GRAY.

SECTION: 211-04

Steering Column Knock – Repair Procedure

AFFECTED VEHICLE RANGE:

LR3 (LA)	**VIN:**	**5A000360 - 8A444606**
	Model Year:	**2005 - 2008**
Range Rover Sport (LS)	**VIN**	**6A900290 - 7A999999**
		7A100000 - 8A122778
	Model Year:	**2006 - 2008**

CONDITION SUMMARY:

MINOR 'KNOCKING' NOISE FROM THE STEERING INTERMEDIATE SHAFT

Situation: A customer may report a concern of a minor 'knocking' noise coming from the front of the vehicle or a steering system component while driving over small bumps or undulating road surfaces. A low resistance in the sliding mechanism of the lower steering shaft may be the cause of the noise.

Action: Should a customer express a concern related to the above condition, refer to the Repair Procedure detailed in this bulletin to diagnose and resolve the concern.

PARTS:

QLB500070	**Upper Intermediate shaft**	**Qty 1 (as required)**
QMN500250	**Lower Intermediate shaft**	**Qty 1 (as required)**
QYG10016L	**Bolt (upper I-shaft to lower I-shaft)**	**Qty 1 (as required)**
QYG000030	**Bolt (lower I-shaft to steering gear)**	**Qty 1 (as required)**

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 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.

Description	*SRO*	*Time (Hours)*	*Condition Code*	*Causal Part*
Replace upper or lower steering column bolt	**57.40.89/40**	**0.10**	C8	QMN500220
Replace upper intermediate shaft	**57.40.22**	**0.30**	33	QMN500240
Replace lower Intermediate shaft (LR3)	**57.40.27**	**0.90**	33	QMN500240
Replace lower Intermediate shaft (Range Rover Sport)t	**57.40.27**	**0.90**	33	QMN500240

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 the bulletin applies to a specific vehicle.

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Normal warranty policy and procedures apply.

REPAIR PROCEDURE

INSPECT AND REPAIR STEERING SHAFT ASSEMBLY

△ **NOTE: All inspection and repair procedures must be completed before determining if an intermediate shaft should be replaced. Component references may be found in Figure 1.**

1. Inspect the upper and lower intermediate shaft assembly as follows:
   - Inspect the upper intermediate shaft 'decoupler' assembly for excessive movement. (Arrowed in Figure 1 inset)
   - Inspect the upper intermediate shaft decoupler assembly and ensure the steel and rubber washers are correctly located. (Inset in Figure 1)
   - Verify that the fasteners joining the steering column universal joint to the upper intermediate shaft are tightened to **22Nm (16lbf-ft)**. (2 in Figure 1)
   - Inspect the joint between the upper intermediate shaft and lower intermediate shaft for any movement. (3 in Figure 1)
   - Inspect the joint between the lower intermediate shaft universal joint and steering gear for any movement. (4 in Figure 1)
   - Inspect the sliding mechanism of the lower intermediate shaft for any lateral 'play' or looseness. (5 in Figure 1)

2. If movement is discovered as quantified below, repair in sequence and as instructed:
   - If excessive movement exists in the upper intermediate shaft 'decoupler' assembly, replace the upper intermediate shaft (QLB500070).
   - If any of the decoupler assembly washers is incorrectly located, replace the upper intermediate shaft (QLB500070).
   - If any movement exists in the connection between the upper intermediate shaft and lower intermediate shaft, replace the retaining bolt (QYG10016L) and tighten to **30Nm (22lbf-ft)**. (3 in Figure 1)
   - If any movement exists in the connection between the lower intermediate shaft universal joint and steering gear, replace the retaining bolt (QYG000030) and tighten to **30Nm (22lbf-ft)**. (4 in Figure 1)
   - If any lateral 'play' or looseness exists in the sliding mechanism of the lower intermediate shaft, replace the lower intermediate shaft (QMN500250).
3. After replacing any components, ensure the integrity of the steering shaft assembly and fasteners.

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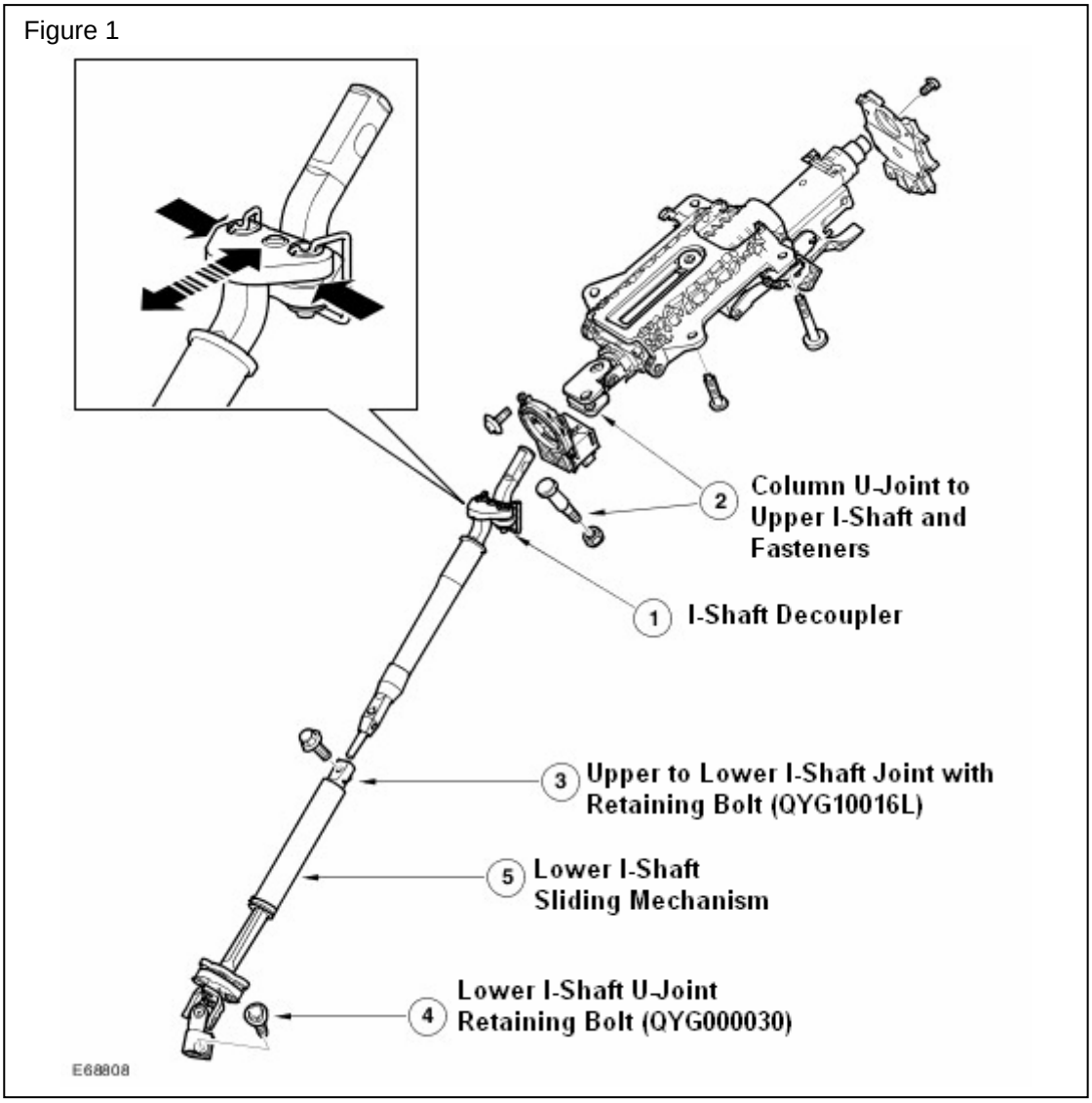
LR3 STEERING COLUMN AND I-SHAFT ASSEMBLY

Figure 1



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