

**SB-10053912-8848**

L319 O-ring SSM update (6).pdf

Reference	SSM60517
Models	Range Rover Sport / L320 LR3 / L319 LR4 / L319
Title	Steering Gear O-ring Fluid Leaks
Category	Chassis
Last modified	07-Aug-2013 00:00:00
Symptom	303000 Steering/Handling
Content	<p><b>Issue:</b> Following warranty analysis of Steering Racks reported to be leaking, 75% have been identified being fault free, following testing.</p> <p><b>Cause:</b> Land Rover Engineering have recently visited dealerships where a request has been made to replace the Steering Gear for an oil leak in the area of the pinion housing, casting, yoke plug or the gaiter adjacent to the pinion housing. Following investigation the source of the leak path was identified as being from the supply and return hose O-ring seals. See attached document for examples.</p> <p><b>Action:</b> If an oil leak is identified from the area of the pinion housing, casting, yoke plug or gaiter ensure that the leak is not as a result of a damaged or leaking O-ring seal on the supply or return hoses.</p> <p>Carry out the following steps where a Steering Gear leak is suspected:</p> <ol style="list-style-type: none"> <li>1. Thoroughly clean the area of the pinion housing, casting, yoke plug, gaiter and pipe connections with a suitable cleaning agent.</li> <li>2. Carefully replace the supply and return O-ring seals regardless of there being no physical damage to the seals. Reference to TOPIx 211- Steering System and top up the fluid level thoroughly clean the Steering Gear.</li> <li>3. Start the engine and allow to idle, rotate the steering wheel lock to lock 3 cycles, switch off engine and then re-assess the area of the leak.</li> <li>4. If there are no signs of damage or fluid leak from the pinion housing, casting, yoke plug, gaiters or O-ring seals, recheck the reservoir level/ top up if necessary and return the vehicle to the customer.</li> <li>5. If a leak is still present, replace the Steering Gear.</li> </ol> <p><b>Caution:</b> If a steering gear is replaced for any reason, new O-ring seals must be installed.</p> <p><b>Caution:</b> Always check Microcat to ensure the correct component level is used when carrying out the above repair.</p> <p><b>Note:</b> The supply and return pipes are attached to the Steering Gear using a single clamp plate attached to the supply pipe. In order to allow the clamp plate to sit flush to the pinion housing, the return pipe flange is undersize and has the effect that it is loose in its bore, however this is design intent and normal.</p>