

TECHNICAL TOPICS POWERTRAIN



Judder Noise while Turning

18MY – Onward Range Rover, RR Sport, Discovery equipped with Twin Speed Transfer Case

Customer Voice:

- It feels like the wheels are locking when turning.
- There is a noise or judder feeling when turning.

Technical Description:

- The noise is identified as originating from the transfer case.

Status:

- Drain the full contents of the transfer case into a clean container.
- Perform a double flush of the transfer case.
- Follow each flush with a drive cycle which includes tight figure 8 turns and activating different terrain response modes.
- Only request replacement of the transfer case if the flush does not successfully rectify the customer complaint.
- Reference the Transfer Case Oil Color Charts in the TOPIx WSM section 308-08C for guidance on the condition of the oil.

SYMPTOM CHART

SYMPTOM	MESSAGE	POSSIBLE CAUSE	ACTION
A Judder or VIB from underneath the vehicle when using steering, input or low speeds. For example turning left or right in a parking lot.	-	Transfer case oil degradation	Complete a double flush of the transfer case as PER the Transfer Case Draining and Filling (308-07C, General Procedures).

The screenshot displays the 'TRANSFER CASE OIL COLOR CHARTS' section of a technical manual. It includes a table with columns for 'OIL CONDITION ACCEPTABLE' and 'OIL CONDITION UNACCEPTABLE'. The 'OIL CONDITION ACCEPTABLE' column shows three color swatches: clear yellow, light brown, and dark brown. The 'OIL CONDITION UNACCEPTABLE' column shows three color swatches: black, dark grey, and light grey. Below the table, there is a note stating: 'Note: The 'No. of Turns' column indicates the number of turns required to complete the drive cycle and activate the terrain response modes. The 'No. of Turns' column indicates the number of turns required to complete the drive cycle and activate the terrain response modes.'

