## Special Service Message

NOTE: A Special Service Message is a formal communication issued by Land Rover and carries the same importance of a Technical Service Bulletin. An SSM is a quick method of communicating "Need To Know" information to the technical service community. SSM's may be issued in advance of a technical bulletin or may be the only communication on a given topic. All information contained in Land Rover technical communications are intended for use by trained, professional technicians with the knowledge, tools, and equipment required to complete the procedure correctly and safely. It informs the Technicians of conditions that may occur on some vehicles, or provides information that could assist in correct vehicle and diagnostic service.

SSM 74642 - 18MY-21MY L405 sensitivity to wheel vibration and secondary ride shake

Models: Range Rover / L405

Engineer Name: Skingle Paul

Last Modified: 15 DEC 2020 09:27:21

Category: Noise Vibration

Symptom: 703000 Vibration Concerns

Content: Issue: Customers report a vibration felt

through the base of the driver's seat

and are visually able to see the upper section

of the passenger seat shaking.

1. Confirm the customer symptom

- 2. Where is the shake felt and/or observed?
- 3. On what road surface is the shake or vehicle vibration most apparent?
- 4. At what vehicles speeds is the vehicle shake most apparent?

Cause: Vehicle sensitivity to road input in shake frequency range

## Action:

- 1. Check for any obvious signs of damage or other issues that may cause the fault observed.
- 2. Wheel & Tyre optimisation-
- 3. Complete: Steering Wheel
  Vibration/Shimmy While Driving (204-00
  Suspension System General
  Information, General Procedures). This is
  using the IDU2 diagnostic tool.
- 4. Record photographic evidence of the output from the dealer diagnostic tool
- 5. If the amount of steering vibration/shimmy is considered unacceptable following the initial road

test completed in the diagnostic procedure, balance the wheel and tyre(s) as necessary: Wheel and Tire Assembly Balancing (204-00 Suspension System - General Information, General Procedures).

- 6. Record and provide photographic evidence of RFV, R1H and balance values
- 7. When fitting the wheels back onto the vehicle, take photographic evidence of RFV high spot being at the top
- 8. Complete: Steering Wheel
  Vibration/Shimmy While Driving (204-00
  Suspension System General
  Information, General Procedures). This is
  to assess the impact of the wheel
  balancing procedure above
- 9. Record photographic evidence of output from dealer diagnostic tool.

Assessment- After adjustments, is the concern now resolved/acceptable?

If so, hand vehicle back to the customer If not, proceed to next step.

• Return to step 5 in wheel/tyre optimisation section.

Assessment- After adjustments is the concern now resolved/acceptable. If so, hand vehicle back to the customer

If the concern is not resolved but the dealer diagnostic tool confirms the vehicle is free of 1st wheel order vibration, proceed to next steps.

- 1. If after the above steps the issue persists raise a TA referencing
- 2. Clear customer concern.
- 3. Wheel & Tyre (RFV) Radial Force Variation and balance values measured.
- 4. Confirmation that all of the above has been completed, detailing the evidence at each step including detailed answers to the customer symptom section
- 5. SSM Ref in the TA.

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