

Noticeable Vibrations At Steering Wheel

Topic number	LI46.35-P-062791
Version	14
Function group	46.35 - Electrical steering
Date	11/7/22
Validity	Model 253 and 293.
Reason for change	Teaching-in of steering limitations added

Complaint

1. Vibrations noticeable at steering wheel when front axle is excited when driving at a speed between 65 km/h and 130 km/h over an obstacle.

- Driving over deeply recessed manhole covers
- Driving over cross joints
- Driving over extreme surface undulations

2. Permanent or long-lasting vibrations at specific speed or engine speed noticeable on steering wheel.

- Roadway surface excitations when DTR+Q is switched on

Cause

Control oscillations in the electric power steering.

Remedy

Perform software update of electric power steering (N68).

After the software update, teach in the steering limitations of the electric power steering again:

1. Start engine
2. Turn steering wheel all the way to the left and briefly hold at the steering limitation
3. Turn steering wheel all the way to the left and briefly hold at the steering limitation
4. Perform a test drive in which you drive at approx. 5-10 km/h in an "8" shape, alternately turning the steering wheel to the steering limitations on the left and right.

Symptoms
Power transmission > Drive shaft > Propeller shaft > Function > Vibration/out-of-balance
Power transmission > Drive shaft > Axle shaft > Function > Vibration/out-of-balance

XENTRY TIPS

Chassis/suspension > Wheels/tires > Tire properties > Vibration/out-of-balance
Chassis/suspension > Steering system > Steering wheel > Vibrates
Chassis/suspension > Steering system > Steering wheel > Pulses

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			4649490	Electric rack-and-pinion steering control unit - Software release