

Noticeable vibrations at steering wheel

Topic number	LI46.35-P-062791
Version	7
Function group	46.35 Electrical steering
Date	12-14-2017
Validity	Model 253
Reason for change	Reference to additional software update to be released with Xentry Diagnosis 02/2018
Reason for block	

Complaint:

1. Temporary vibrations (max. 2 seconds) noticeable at steering wheel when front axle is excited by driving over road irregularities at speeds between 45 mph and 90 mph (70 km/h and 150 km/h)..

Excitation examples:

- 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.

Cause:

1. Possible control oscillations in the electric power steering.
2. In these cases, the complaint should be searched for in the area of the wheels/tires and/or in the drivetrain.

Remedy:

Cause 1:

1. Update software for electric steering (N68).

If the vibrations still persist, then adjust the thrust piece play for the electric power steering. Use work instructions AR46.20-P-0601CW as reference document for the adjustment, as a corresponding document for the electric power steering is not available.

Note:

- Operation steps 6-9 in AR46.20-P-0601CW may not be used here
- Adjustment screw may only be tightened for the adjustment (turn to right). Opening the adjustment screw (turning to left) is not permissible
- If the measured initial play is greater than 0.5 mm - Replace steering
- Set value: 0.04 mm (do NOT exceed this value)

Note:

XENTRY TIPS

- If the vibrations still exist after these operation steps, please create a PTSS case and attach N68 control unit log.
- Another software update for the electric steering will be available with Xentry Diagnosis 02/2018.

Cause 2:

2. In these cases, please follow appropriate diagnostic steps and submit a PTSS case.

Symptoms
Chassis/suspension / Steering system / Steering wheel / Vibrates
Chassis/suspension / Steering system / Steering wheel / Pulses
Power transmission / Drive shaft / Propeller shaft / Function / Vibration/out-of-balance
Power transmission / Drive shaft / Axle shaft / Function / Vibration/out-of-balance
Chassis/suspension / Wheels/tires / Tire properties / Vibration/out-of-balance

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			46494 90	Electric rack-and-pinion steering control unit - Software release