NTG5.5, NTG6: Vehicle positioning inaccurate / implausible, route guidance not possible

Topic number	LI82.85-P-064727
Version	10
Function group	82.85 Navigation and Communication systems
Date	01-13-2020
Validity	Model series 213, 238 Model series 257, 205 from code 809, Model series 177, 247, 167, 253 from code 800
Reason for change	Cause and remedy adapted.
Reason for block	

Complaint:

The vehicle positioning in the central display may be intermittently inaccurate and may deviate from the road during a drive cycle.

Cause:

- GPS antenna hardware [model series 213 and 238 up to and including modification year 17/2 (code 808 + 058)]

- Surround View System camera in the side mirror may affect the function of the GPS antenna [vehicles from and including modification year 18/1 (code 809) and Surround View System (code 501)]

Remedy:

GPS antenna hardware:

- If one of the following DTCs is "current" or "stored" in the Audio 20/COMAND Online control unit (A26/17) or the telematics services (HERMES) control unit (N112/9), then replace the GPS antenna:

B142E13 "The GPS antenna has a malfunction. There is an open circuit."

B142E11 "The GPS antenna has a malfunction. There is a short circuit to ground."

B142E31 "The GPS antenna has a malfunction. No signal." (only with N112/9, Hermes)

- If none of the above DTCs are active or stored, check the GPS antenna actual values using Xentry Diagnostics. Ensure this is done in open air with the trunk lid or rear hatch closed. Compare these values with the actual location data (Google Earth, known good reference vehicle, etc.). Move the complaint vehicle to a new location (at least 200 feet away) and check the actual values of the GPS antenna again. If the geo-coordinates do not change then replace the GPS antenna.

For vehicles with code 501 (Surround View System):

- Remove the fuse for the 360 degree camera in the mirror where the GPS antenna is installed.

- Perform the above test sequence again.

Symptoms

Communication/information / Communication / Navigation / Navigation - Function / No satellite reception

Communication/information / Communication / Navigation / Navigation - Function / Driving directions incorrect/navigation system imprecise

Communication/information / Communication / Navigation / Navigation - Function / Route guidance incorrect/implausible

Communication/information / Communication / Navigation / Navigation - Function / Error in map display

Control unit/fault code		
Control unit	Fault code	Fault text
A40/3 / A26/17 - Audio or CO- MAND (Head unit) (HU5) (GLC (253),E (213),C (205),E (238))	B142E11	The GPS antenna has a malfunction. There is a short circuit to ground.
A40/3 / A26/17 - Audio or CO- MAND (Head unit) (HU5) (GLC (253),E (213),C (205),E (238))	B142E13	The GPS antenna has a malfunction. There is an open circuit.
N112/9 - Control unit for te- lematics services (HERMES) (GLS (167),GLC (253),E (213) ,GLE (167),CLS (257),C (205), A (177),E (238),B (247))	B142E31	The GPS antenna has a malfunction. The signal is not present.