

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

Topic number	LI82.85-P-064727
Version	8
Function group	82.85 Navigation and Communication system (CNS, ICS, COMAND, FleetBoard)
Date	04-09-2018
Validity	BR213
Reason for change	Adaptation of operation item
Reason for block	

Complaint:

The vehicle positioning in the central display is intermittently inaccurate and may drift away from the road although the vehicle is still on the road.

Cause:

Possibly GPS antenna.

Remedy:

a) If one of the following fault codes is logged in the fault memory of Audio20 A26/17, COMAND Online A26/17 control units or the control unit for telematics services (Hermes) N112/9, as "current" or "stored", then the GPS antenna is to be replaced:

- 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)

b) If none of these fault codes is logged, it is essential to check the GPS antenna using Xentry Diagnostics:

(NOTE: The function check of the GPS antenna must always be performed under a clear sky so that unobstructed reception of the satellites is guaranteed. The trunk lid or rear-end door must be closed.)

- Check the position of the vehicle using the actual values of the GPS antenna. Compare these values with the current location data (empirical value, reference vehicle etc.). If there are substantial variations, it can be assumed that the GPS antenna is causing the complaint.

- By means of a position change of the complaint vehicle, the function of the GPS antenna can be checked with the aid of the actual values. If the geocoordinates do not change when the vehicle is moved, it can be assumed that the GPS antenna is causing the complaint.

-> Replacement of GPS antenna

NOTE: Always refer to the note about the part numbers. The up-to-date part numbers are stored in the EPC.

XENTRY TIPS

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 COMMAND (Audio) (HU5)	B142E11	The GPS antenna has a malfunction. There is a short circuit to ground.
A40/3 / A26/17 - Audio or COMMAND (Audio) (HU5)	B142E13	The GPS antenna has a malfunction. There is an open circuit.
N112/9 - Control unit for telematics services (HERMES)	B142E31	The GPS antenna has a malfunction. The signal is not present.

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 213 905 50 09			GPS (global positioning system) antenna	1	To be used for BR 213	X
A 238 905 44 02			GPS (global positioning system) antenna	1	To be used for BR 238	X

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
82-8012	REPLACE ANTENNA FOR GLOBAL POSITIONING SYSTEM (GPS) IN LEFT OUTSIDE MIRROR		82858 TB	