

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

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| Topic number | LI82.85-P-064727 |
| Version | 3 |
| Design group | 82.85 Navigation and Communication system (CNS, ICS, COMAND, FleetBoard) |
| Date | 11-30-2016 |
| Validity | BR213 |
| Reason for change | Remedy adjusted |
| Reason for block | |

Complaint:

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

Cause:

- 1.) GPS antenna.
- 2.) Software release of Audio20 control unit A26/17 or COMAND Online control unit A26/17.

Remedy:

- 1.)
 - a) If one of the following fault codes is logged in the fault memory of the Audio20 control unit A26/17 or the COMAND Online control unit A26/17, the GPS antenna must be replaced:
 - B142E31 "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"
 - 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 to seek 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 there may be a GPS antenna malfunction.
 - By means of a position change of the problem 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 there may be a GPS antenna malfunction.
- > Replacement of GPS antenna

XENTRY TIPS

If the tests described do not reveal any causes in the GPS antenna, then do not replace the GPS antenna and continue with remedy 2.).

2.)

COMAND Online (code 531): Software update of COMAND Online control unit to software release E61.0 or higher. This software release is available as of XENTRY version 09/2016 or later.

| 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/improbable |
| 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 COMAND (Audio) (HU5) | - | - |

| Operation numbers/damage codes | | | | |
|--------------------------------|---|------|-------------|--|
| Op. no. | Operation text | Time | Damage code | Note |
| 82-7983 | REMOVE/INSTALL/REPLACE ANTENNA FOR GLOBAL POSITIONING SYSTEM (GPS) IN LEFT OUTSIDE MIRROR | | 82858 TB | Only for remedy 1. Only for remedy 1. |
| 54-0650 | MAINTAIN ON-BOARD ELECTRICAL SYSTEM VOLTAGE (FOR TESTING AND DIAGNOSIS WORK) | | 8210S 50 | Only for remedy 2. Only for remedy 2. |
| 54-1011 | PERFORM QUICK TEST | | 8210S 50 | Only for remedy 2. Only for remedy 2. |
| 82-9905 | PERFORM SOFTWARE UPDATE FOR RADIO/COMAND | | 8210S 50 | Only for remedy 2. Only for remedy 2. |