

Malfunction of the hand detection system

Topic number	LI46.10-P-078012
Version	8
Function group	46.10 - Steering wheel, jacket tube, steering shaft, steering lock
Date	7/17/26
Validity	Vehicles with a capacitive steering wheel with code 266 and manufacturing date as of 2020
Reason for change	updating wording.

Complaint

Hand detection system – malfunction / vehicles with code 266

Fault message in instrument cluster:

"Active Emergency Stop Assist not available"

"Active Lane Keeping Assist not available"

"Active steering assist not available"

Cause

Possible causes: Hand detection mat, hand detection control unit, contacts, and electrical feed line.

Remedy

In the event of a customer complaint and

fault code in IDC control unit: U186B29 in IDC223 or fault code U0429E0, U042941, U042929, U042902, U0429E1 in IDC213 or

fault code in HOSWD control unit: B1E7614

Check:

Please do not replace the HOSWD control unit.

Please flash the new SW and perform the SCN coding for the HOSWD control unit (N179/1) (available from July 2026).

The software can be flashed onto all HOSWD213 with HW number A0009011522 and all HOSWD223 with HW number A0009011422.

Please also flash the SW for the IDC control unit (N62/4), if possible (only applies to HOSWD223).

Erase fault memory

Remedy:

Turn on the ignition or start the engine without touching the steering wheel.

If, after 10 seconds without touching the steering wheel, one of the three fault messages appears on the instrument cluster:

Check the contacts and feed lines in the steering wheel by means of a visual inspection for damage, crimp connections, loose connections, etc. (example in picture 2 and 3).

If there is visible damage -> replace the steering wheel electronics or the feed lines.

If there is not any visible damage -> replace the steering wheel rim.

If a yellow message does not appear on the instrument cluster within 10 seconds:

Grasp the steering wheel fully with both hands, including the chrome molding at the 6 o'clock position (see picture 1).

If the fault is triggered by grasping the steering wheel rim or pressing the clip at the 6 o'clock position, check the contacts and feed lines in the steering wheel by means of a visual inspection for damage, kinked connections, loose connections, etc. (example in picture 2 and 3). Check the ground connections (screw connections and cables to the steering wheel rim); if necessary, retighten the screws/bolts and check for corrosion (picture 4).

If there is visible damage -> replace the steering wheel electronics or the feed lines.

If there is not any visible damage: Replace the steering wheel rim.

Please do not replace the HOSWD control unit.

A TIPS case should be created if fault profile is unclear.

In the event of a customer complaint and a further fault code in HOSWD:

B1E7713:

Check the ground connections (screw connections and cables to the steering wheel rim); if necessary, retighten the screws/bolts and check for corrosion (picture 4).

B1F1F04:

Check the control unit of the hand detection system; if necessary, replace this with the control unit from a donor vehicle (make sure that the hardware part numbers are identical).

Attachments	
File	Description
Picture 1.PNG 	Picture 1
Picture 2.PNG	Picture 2



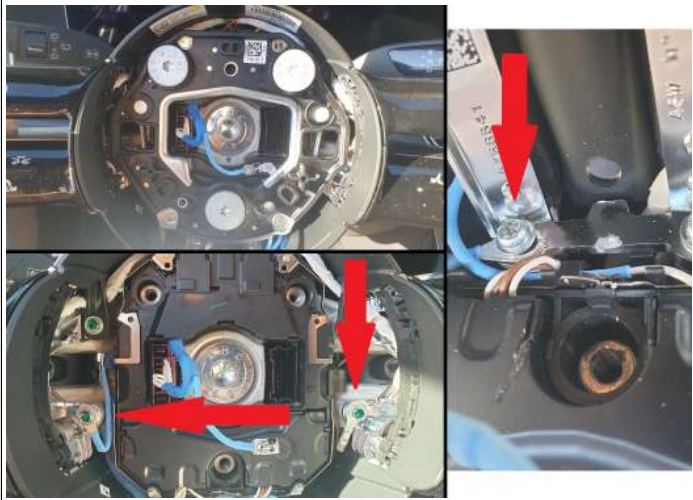
Picture 3.PNG

Picture 3



Picture 4.jpg

Picture 4



Disclaimer

NOTE: The information contained in this document is intended for use by trained, professional technicians with the knowledge to properly and safely perform diagnosis and repairs on Mercedes-Benz vehicles, using Mercedes-Benz approved tools and equipment. It informs service technicians about conditions that could occur in certain vehicles and provides information that could assist in proper vehicle diagnosis, service, or repair. It does not indicate that a defect is present in any vehicle referenced in this document nor does it imply warranty coverage. DO NOT assume that a symptom or condition, or a described cause of a symptom or condition, affects any particular vehicle or groups of vehicles, or that a described repair applies to any particular vehicle or groups of vehicles. There can be multiple causes resulting in the same or similar symptoms or conditions described in this document, and trained professional service technicians must use their diagnostic skills to make evaluations on a case-by-case basis. The information contained in this document does not guarantee warranty coverage nor does it extend the vehicle's warranty in any way.

Symptoms
Chassis/suspension > Brake system > Brakes/traction regulation system > Brake assist system BAS > Display message > Brake assist - not available
Lighting > Exterior lights > Driving lights > Adaptive Highbeam Assist > Warning message in instrument cluster
Overall vehicle > Power supply > Fuel cell > Malfunction
Communication/information > Assistance and warning systems > Active Steering Assist > Malfunction
Communication/information > Assistance and warning systems > Active Steering Assist > Warning message in instrument cluster

Control unit/fault code	
Control unit	Fault text
N179 - Hand detection system (HE) (HOSWD213)	P1CA000 - Initial startup was not performed. _ P164456 - An incorrect variant coding or configuration was detected. An incorrect or incompatible configuration was detected. B1F1F04 - Control unit 'Hand-detection system' has a malfunction. There is an internal fault. B1E7713 - The ground connection of the control unit 'Hand detection system' has a malfunction. There is an open circuit. B1E7614 - The sensor mat of the control unit 'Hand detection system' has a malfunction. There is a short circuit to ground or an open circuit.
N62/4 - Mercedes-Benz Intelligent Drive (SG-FAS) (IDC213)	U0429E1 - Implausible data were received from the steering column module. _ U042902 - Implausible data were received from the steering column module. There is a general signal fault. U042929 - Implausible data were received from the steering column module. There is an invalid signal. U042941 - Implausible data were received from the steering column module. There is a general checksum error.

	U0429E0 - Implausible data were received from the steering column module. _
N179 - Hand detection system (HE) (HOSWD223)	P1CA000 - Initial startup was not performed. _ P164456 - An incorrect variant coding or configuration was detected. An incorrect or incompatible configuration was detected. B1F1F04 - Control unit 'Hand-detection system' has a malfunction. There is an internal fault. B1E7713 - The ground connection of the control unit 'Hand detection system' has a malfunction. There is an open circuit. B1E7614 - The sensor mat of the control unit 'Hand detection system' has a malfunction. There is a short circuit to ground or an open circuit.
N62/4 - Driver assistance system (SG-FAS) (IDC223)	U186B29 - Communication with control unit 'Hand detection system' has a malfunction. There is an invalid signal.

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			46248GI	Steering wheel – faulty hand detection system
			46803	Hand detection control unit
			5983Z	Contacts/line, hand detection control unit