

Instrument Cluster Message for Active Emergency Stop Assist not active/Active Lane Keep Assist

Topic number	LI46.10-P-078012
Version	1
Function group	46.10 - Steering wheel, jacket tube, steering shaft, steering lock
Date	7/15/24
Validity	Vehicles with capacitive steering wheel with code 266 and manufacturing date as from 2020
Reason for change	Proposed measures adapted

Complaint

Hand detection system not operating correctly / vehicles with code 266

Fault message in instrument cluster:

"Active Emergency Stop Assist not available"

"Active Lane Keeping Assist not available"

Cause

Possible causes: the hand detection mat, the hand detection control unit, the contacts and the steering wheel harness.

Remedy

Test Procedure:

Perform an initial quick test with freeze frame data. Save the N179 - Hand detection system (HE) and N62/4 - Driver assistance system (SG-FAS) control unit logs. Note the fault frequency of fault codes set.

Delete the N179 and N62/4 fault memory.

Using both hands, "scan" the steering wheel all the way round, including the chrome molding at 6 o'clock (see Picture 1).

Read out fault memory and follow steps below for any faults set.

Remedy:

Vehicles with control unit N179 - Hand detection system (HE):

B1E7614:

Check contacts and wiring harness in steering wheel by carrying out a visual check for damage, pinched areas, loose connections, etc. (examples in Figs. 2 and 3); if no damage is noted replace the N135 - Steering wheel electronics (LRE) and reassess. If fault code returns replace the steering wheel.

B1E7713:

XENTRY Tips

Please check the wires and connections in the steering wheel. Afterwards, please check whether the complaint is caused by over torqued screws on steering wheel trim pieces. To do this, please loosen the screws slightly and re-evaluate the situation. (Picture 4).

P164456:

Perform SCN coding.

P1CA000:

Perform an initial start-up on the N179 hand detection control unit.



Faults in N62/4 - Driver assistance system (SG-FAS) control unit with U186B29, U0429E0, U042941, U042929, U042902, U0429E1:

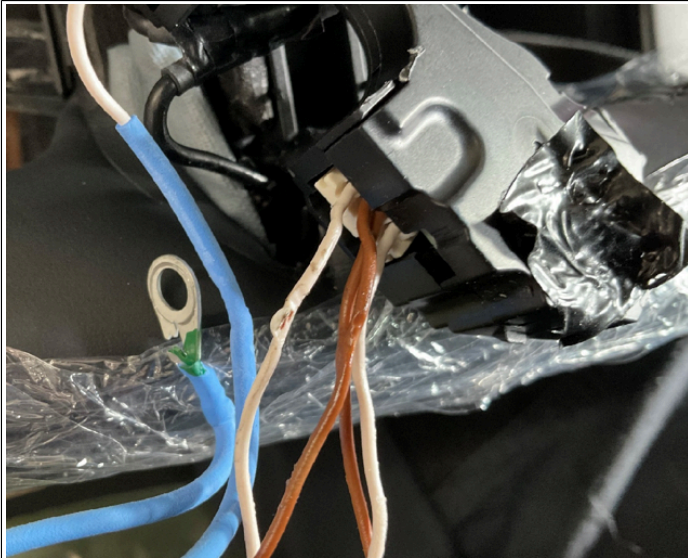
If no fault is stored in the N179 control unit:

Scan steering wheel as indicated in the test procedure and check whether the fault is reproducible.

If no fault code is stored in the hand detection control unit, the fault codes in the driver assistance systems control unit are precautionary messages.

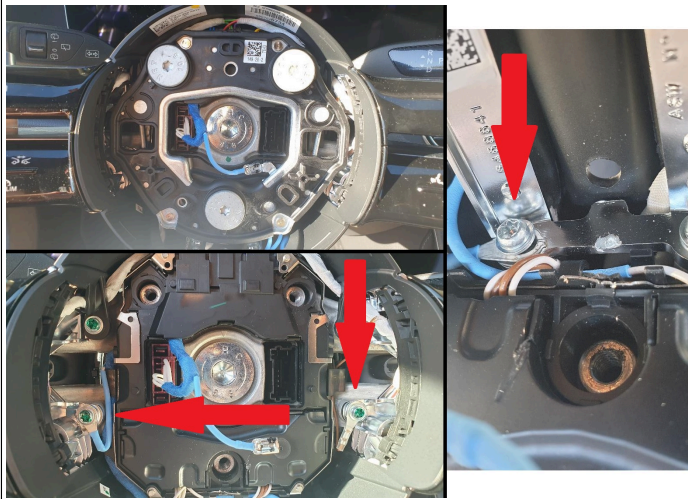
Software for the N62/4 - Driver assistance system (SG-FAS) is in preparation to reduce erroneous messages in the driver display.

Attachments	
File	Description
Picture 1.PNG 	Picture 1 Hand Positions
Picture 2.PNG 	Picture 2 Harness damaged
Picture 3.PNG	Picture 3 Harness damaged



Picture 4.jpg

Picture 4 Screw connections



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

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
N62/4 - Driver assistance system (SG-FAS) (IDC223)	U186B29 - Communication with control unit 'Hand detection system' has a malfunction. There is an invalid signal.
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) (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.
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.

Operation numbers/damage codes

XENTRY Tips

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