



SIB 34 02 23

SERVICE SOLUTION: Wheel Speed Sensor Fault Indicators

2023-09-07

MODEL

Model	Type Code	Model Description	Production Date
K46	0D60	S 1000 RR	2016-2018
K47	0D62	S 1000 R	2016-2020
K49	0D13	S 1000 XR	2016-2019
K63	0E53	S 1000 R	2021-2023
K67	0E23	S 1000 RR	2019-2022
K69	0E43	S 1000 XR	2019-2023

SITUATION

Front and rear wheel speed sensor faults (0x3A1800 and 0x3A1801) appear after the bike is being revved over 5000 RPM while still on the side stand, sometimes in conjunction with the side stand fault 0X3A1331.

When the engine is revved up while on the side stand, vibrations are sent through the entire motorcycle. This vibration intensity varies from bike to bike.

This vibration can cause particular movement between the wheel speed sensor and the sensor rings depending on the position of the sensor to the ring. The movement is picked up as rotation speed and is called "ghost speed". This "ghost speed" follows the increase in RPM's.

5000 RPM = approx. 12 MPH

10000 RPM = approx. 31 MPH

PROCEDURE

The wheel speed logic in the software has been improved.

The signals from both wheel speed sensors are now compared and only the lower one is used. Normally, one of the two wheel speed sensors is less affected by the vibrations than the other, as a result the number of incidents is reduced.

This software was introduced on the S models with BMS-MP control unit with I-level 20-03-500 and earlier on the S models with BMW-O control units.

Because the side stand switch must also be guaranteed, the following test is required for every complaint.

1. Check the mounting of the side stand and condition of the spring.
2. Check the mounting of the side stand and plug connection.
3. Check the side stand switch with ISTA.
4. Check the wheel speed sensors for damage and correct function in ISTA.
5. Check wires for damage and chafe marks.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Contact the BMW Technical Support Group via TSARA
Warranty inquiries	Submit an IDS ticket to the Warranty Department
Parts inquiries	Submit an IDS ticket to the Motorrad Parts Department

Supporting Materials

[picture_as_pdf 34 02 23 Service Solution - Wheel speed fault indicators.pdf](#)

