



SIB 33 01 24

SERVICE SOLUTION: Chassis Calibration Failure

2024-02-08

MODEL

Model	Type Code	Model Description
KA1	0M23	R 1300 GS

SITUATION

The Dynamic Suspension Adjustment (DSA) chassis cannot be calibrated.

PROCEDURE

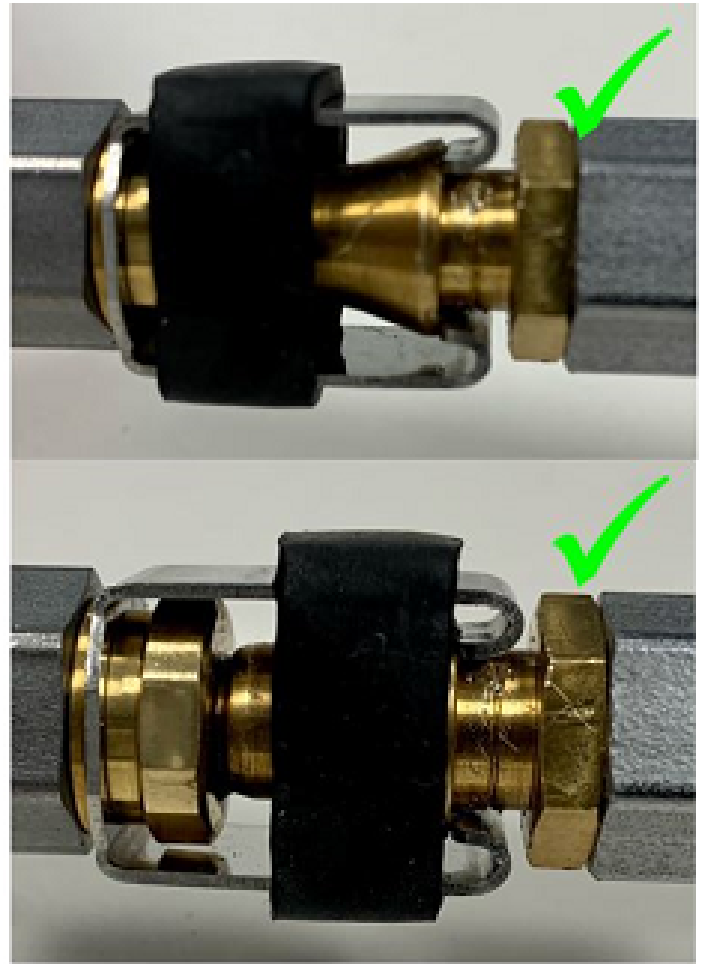
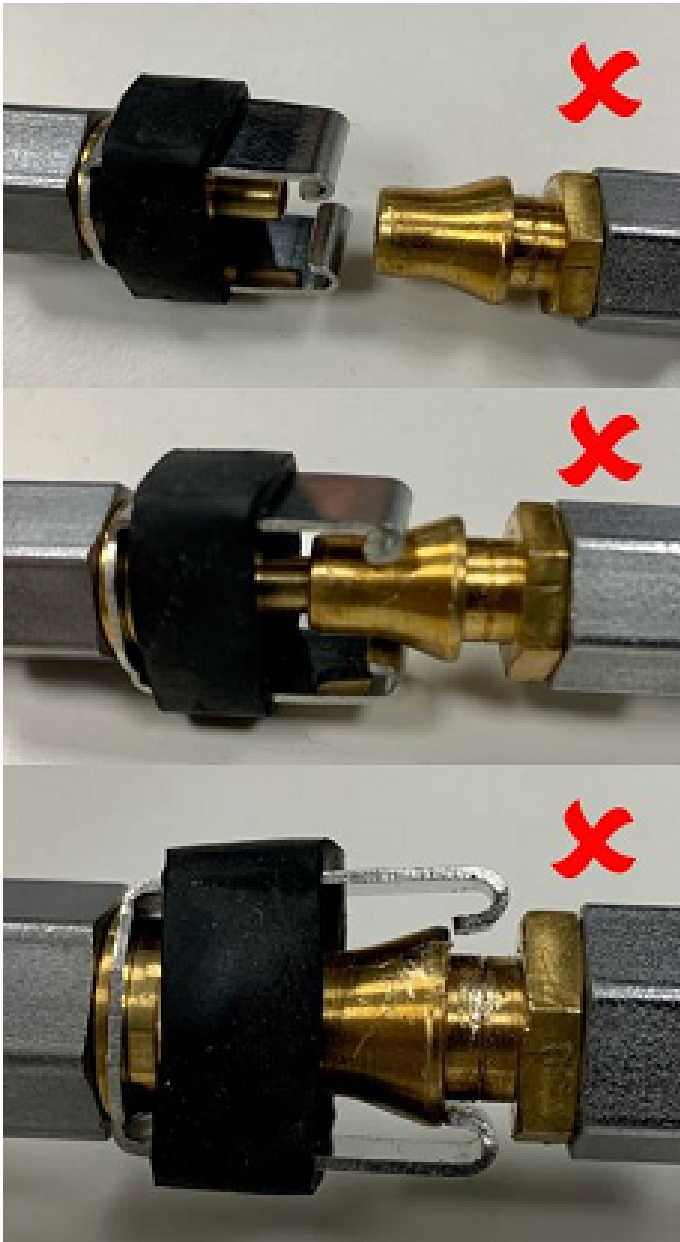
Diagnostic Procedure to determine a root cause:

Pre-Check items:

- Update the ISTA version to 4.45.10 or newer.
- Work on the vehicle at room temperature of at least 68°F (20°C). If outside temperatures are cold, allow the vehicle to warm up before working on it.
- Set vehicle to drive mode: "Road" and ride height to "Auto".
- Check the suspension struts for freedom of movement and contamination.
- Check the ride height sensors (position, correct? linkage bent?)
- Connect the vehicle to a suitable battery charger. The vehicle voltage must be supplied with at least 13.9 V.

Diagnosis:

- Thoroughly process the fault memory using the Guided Diagnosis; in particular, the following faults indicate problems with the vehicle electrical system, the battery, or an insufficient voltage supply:
 - 0x801C5E - Chassis, vehicle electrical power system: Turn-off
 - 0x801C5F - Chassis, vehicle electrical power system: Degradation
 - 0x801CAC - Energy management: Shutdown concept level2
 - 0x801CB1 - Energy management: Shutdown concept level1
 - 0x801CBE - Battery Guard: State of charge implausible
 - 0x801CBF - Energy management: State of charge implausible
- Use ISTA to carry out the "Calibrate complete hydraulics" test module and follow the instructions. Observe/check the stroke of the preload adjusters during calibration.
 - Did the chassis lower after the calibration?
 - If yes and there are no more chassis fault memories displays, then the bike is working as designed.
- If Not Continue the checks
- If the chassis does not move into the high and low positions or the chassis remains in the high position,
 - carry out a visual inspection of the snap fasteners of the hydraulic lines. Snap fasteners with retaining clips that are open due to bending can come loose during calibration. If you notice a loosened snap fastener, bend the retaining clips slightly together, connect the snap fastener correctly and slide the rubber retainer onto the clips.
 - Delete the fault memory and calibrate the complete hydraulics again. Repeat one more time if necessary.



If calibration is not possible after the above-mentioned checks.

- Front and rear preload adjusters / suspension struts move up and down. Calibration failed several times. You must replace the hydraulic pump (do not exchange pumps from other vehicles).

NOTE: Before replacing the hydraulic pump, carry out the “Hydraulic suspension pump actuation” test module (With ISTA version 4.45.20 or newer) or the “MPU replacement preparation” test module (Using ISTA version 4.45.10 or newer). Then execute the “Lower chassis” service program. Only replace the hydraulic pump if the chassis is in the low position.

- Front and rear preload adjusters / suspension struts remain in the high position and one or more of the following faults are stored: 0x801D2A, 0x801CD8, 0x801C1A.
 - suspension struts and the hydraulic pump must be replaced.
- Front preload adjuster / suspension strut did not move, rear preload adjuster / suspension strut could be moved up and down.
 - Defective changeover valve
 - Replace the rear suspension strut

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- Preload adjusters / suspension struts have moved partially or stiffly.
 - Please lower the vehicle again and observe the suspension struts.
 - The vehicle did not lower:
 - Replace the hydraulic pump. Before replacing the pump, ensure that the chassis is lowered. If this is not done first, there is a risk of overfilling, and the new hydraulic pump will be damaged.
 - The Vehicle lowered:
 - Create a TSARA case, market support must evaluate the calibration values.

NOTICE: Make sure to follow all WPPM (Warranty Policy and Procedures Manual) guidelines for when TSARA cases are required.

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 33 01 24 SERVICE SOLUTION - Chassis Calibration.pdf](#)

