



SIB 33 03 21

JUDDER DAMPER: TORSIONAL PLAY IN THE REAR WHEEL

MODEL

E-Series	Model Description
K63	S 1000 R
K66	M 1000 RR
K67	S 1000 RR
K69	S 1000 XR

SITUATION

The presence of torsional play is noticed between the chain sprocket support and the judder dampers/rear wheel, as shown in the attachments. The play is noticeable even though no wear is seen on the judder dampers and components.

Please note that judder dampers are designed to settle in during the first 600-1200 miles of utilization, after which the settling should stop. The play should not increase past the allowed tolerance of 3mm.

As designed, the judder dampers are an extremely tight fit into the wheels when they're new.

PROCEDURE

Please measure the circumferential backlash (play in the rotation of the wheel vs sprocket) twice at 180° intervals as shown in the attached instructions.

A torsional backlash of up to 3.0 mm is acceptable and replacement of the judder dampers is not recommended, as a torsional backlash within this tolerance will occur again within a short usage.

If the circumferential backlash is more than the allowed tolerance of 3mm, please create a TSARA case and attach the values measured in millimeters.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Motorcycles, if applicable.

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 03 21 JUDDER DAMPER TORSIONAL PLAY IN THE REAR WHEEL.pdf](#)

[insert_drive_file IMG_3725.jpg](#)

[picture_as_pdf Testing Play in Judder Dampers.pdf](#)

Videos

[330121](#)

Service Information Bulletin

Rear Axle, Rear Drive

June 2, 2021

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**BMW
MOTORRAD**

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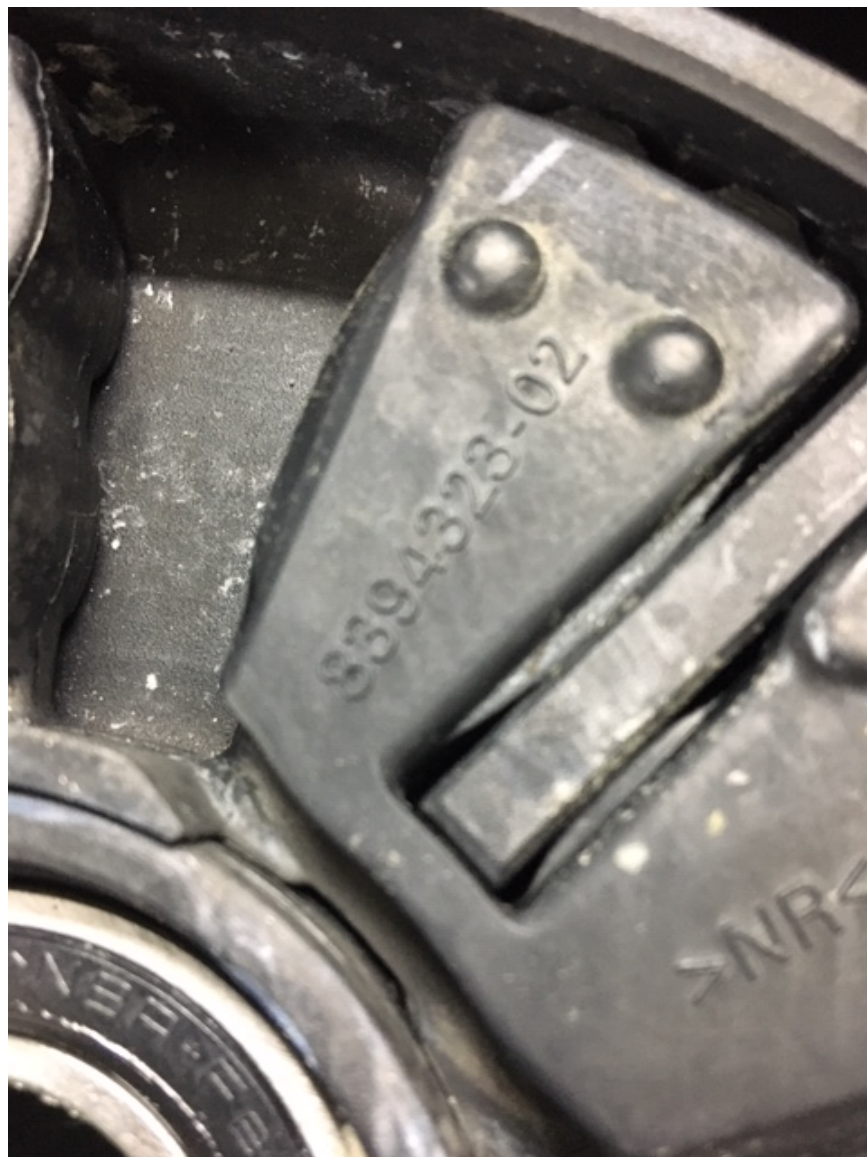
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Test: Verdreh-Spiel Rückdämpfer / Torsion-Clearance absorber RR wheel

1. Ziel

Hiermit soll das mögliche Spiel –aufgrund von Verschleiß an den Rückdämpfer- zwischen Felge und Kettenradträger ermittelt werden:

- Für die Messung ist der Neutral-Gang einzulegen.
- Kettenrad jeweils einmal auf rechten und einmal auf linken Anschlag drehen und den Messvorgang jeweils für jede Seite separat durchführen. Dafür muss beim zweiten Messvorgang eine neue Markierung gesetzt werden.
- Bei vorhandenem Spiel sollte die Messung bei Möglichkeit jede 5.000 km durchgeführt werden.

This is to determine the possible torsion-clearance - caused by abrasion on absorber RR wheel - between rim and chain wheel mount:

- For measuring the neutral gear has to be engaged.
- Turning chain wheel once on a right and once on a left stop and carrying out the measurement process for every side respectively separately. For this a new marking must be put at the second measurement process.
- In presence of clearance, measurements should be carried out by each 5000 km.

2. Durchführungsbeschreibung

2.1 Fahrzeug aufbocken auf Hauptständer oder aufstellen auf Seitenständer → Hinterradbremse für die weiteren Schritte betätigen.

2.1 Jacking up vehicle on main columns or setting up on prop stand → rear brake must be applied during the measuring.

2.2 Drehmomentschlüssel auf 20 Nm einstellen.

2.2 Adjusting torque wrench on 20 Nm.



2.3 Mutter für die Prüfung markieren
- alle Messungen müssen an der gleichen Stelle durchgeführt werden.

2.3 Marking nut for the measurement
- whole measurement has to be carried out at the same place.





2.4. Sekundärtrieb mit Drehmoment- Schlüssel vorspannen (20 Nm)



2.4 Turn screw (marked nut) with torque wrench (20Nm) to tension the system.



2.5. Markierung am Rad und KRT bei vorgespanntem Sekundärtrieb setzen:
- dafür einen Lack-Stift verwenden



2.5 Marking chain wheel and chain wheel mount with white touch-up pencil while system is tensioned:
- after drying: a thin line



2.6 Sekundärtrieb mit Drehmoment- Schlüssel in der anderen Drehrichtung spannen (20 Nm).



2.6 Turn Screw (marked Nut) in opposite direction as 4. with torque wrench (20Nm).





2.7 Messung zwischen Rad und KRT an den gesetzten Strichen bei vorgespanntem Sekundärtrieb durchführen:
- die Messungen in einer Tabelle mit V-Nummer der Fzg. und Laufleistung festschreiben



2.7 Measuring distance (f.e. with calliper) between the two thin lines on chain wheel and chain wheel mount while system is tensioned:
- list all measurements in a table including V-number and mileage of vehicle



2.8 Zweite Messung (2.4 bis 2.7) mit Anschlag auf andere Seite wie bei erster Messung.



2.8 Second measuring (2.4 to 2.7) with stop on other side than first measurement.

7. Bestätigung der Durchführung

Name:

Datum:

Kurzzeichen/Firma:

Unterschrift: