



SIB 31 03 18

2022-02-22

**CRACKING NOISE FROM FRONT OF VEHICLE WHILE TURNING
OR PARKING**This Service Information Bulletin (Revision 3) replaces SI B31 03 18 **dated July 2018**.**What's New** (Specific text highlighted):

- Procedure
- Warranty
- Attachment

MODEL

F80 (M3 Sedan)	F82 (M4 Coupe)	F83 (M4 Convertible)	F87 (M2 Coupe)
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SITUATIONCracking noises heard from the area of the front axle when rotating the steering while stationary or at low speed. Refer to the linked video <https://tinyurl.com/y9l1ddolz>**CAUSE**

Loose connections securing front axle and/or front-end components.

CORRECTION

Tighten the loose components, or lubricate the bearing surfaces.

PROCEDURE

For conditions that are similar to the situation described in this Service Information Bulletin:

Perform the Front Axle Steering Noise Elimination Procedure in the chronological order as described in the attachment.

- Procedure I: Check Spring Strut Shock Absorber
- Procedure II: Check Stiffening Plate Screws
- Procedure III: Check Front Axle Supports
- Procedure IV: Lubricate Wheel Bearing Surface

PARTS INFORMATION**Only use and invoice the part numbers below that apply.**

Part Number	Description	Quantity
83 19 2 298 825	Repair kit	2
34 11 1 123 072	Inner hex bolt, brake disc	4
Refer to ETK	Wheel bearing bolts	8
33 32 6 768 354	Hex screw with collar (stiffening plate)	8
07 11 9 905 418	Hex bolt with washer	2
33 32 6 768 884	Hexagon nut with collar	2

CLAIM INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

Main work	The vehicle arrives for this job/work procedure, no other Main work will be performed or claimed during this workshop visit
Plus work	The vehicle is already in the workshop

(+)

Only one of the flat rate labor operation codes listed below can be used for claim submission and reimbursement. Also, only one Main work flat rate labor operation code can be claimed per workshop visit.

Defect Code:	3131903900	F80 F82 F83 F87 Cracking noise from front end area during steering / parking
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Reimbursement will be via normal claim entry utilizing the applicable work package information below, and when required, the part numbers listed above that apply.

Performing Procedure I Only

Work Pkg	Labor Operation	Description	Labor Allowance
# 1	00 65 307	Procedure I: Check Spring Strut Shock Absorber (Main work)	6 FRU
Or:			
# 2	00 65 984	Procedure I: Check Spring Strut Shock Absorber (Plus work)	4 FRU

Or:

Performing Procedures I and II

Work Pkg	Labor Operation	Description	Labor Allowance
# 3	00 65 308	Procedure I: Check Spring Strut Shock Absorber and Procedure II: Check Stiffening Plate Screws (Main work)	12 FRU
Or:	Or:		
# 4	00 65 985	Procedure I: Check Spring Strut Shock Absorber and Procedure II: Check Stiffening Plate Screws (Plus work)	10 FRU

Or:

Performing Procedures I, II and III

Work Pkg	Labor Operation	Description	Labor Allowance
# 5	00 65 309	Procedure I: Check Spring Strut Shock Absorber; Procedure II: Check Stiffening Plate Screws and Procedure III: Check Front Axle Supports (Main work)	30 FRU (F80, F82 and F83); 28 FRU (F87)
Or:			
# 6	00 65 986	Procedure I: Check Spring Strut Shock Absorber; Procedure II: Check Stiffening Plate Screws and Procedure III: Check Front Axle Supports (Plus work)	28 FRU (F80, F82 and F83); 27 FRU (F87)

Or:

Performing All Four Procedures

Work Pkg	Labor Operation	Description	Labor Allowance
# 7	00 65 310	Procedure I: Check Spring Strut Shock Absorber; Procedure II: Check Stiffening Plate Screws; Procedure III: Check Front Axle Supports and Procedure IV: Lubricate Wheel Bearing Surface (Main work)	42 FRU (F80, F82 and F83); 41 FRU (F87)
Or:			
# 8	00 65 987	Procedure I: Check Spring Strut Shock Absorber; Procedure II: Check Stiffening Plate Screws; Procedure III: Check Front Axle Supports and Procedure IV: Lubricate Wheel Bearing Surface (Plus work)	40 FRU (F80, F82 and F83); 39 FRU (F87)

Claim Repair Comments

Only reference the SIB number and the work package (Pkg) number performed in the RO technician notes and the claim comments (For example: B31 03 18 WP 1), unless otherwise required by State law.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Submit feedback at the top of this bulletin
Warranty inquiries	Please contact the Warranty department by either using the Live Chat that's available in the Warranty Documentation Portal or through IDS by selecting Coverage, Policy, Coding Questions and Mileage Corrections
Parts inquiries	Submit an IDS ticket to the Parts Department

Supporting Materials

[picture_as_pdf B31 03 18 Attachment.pdf](#)

Videos

[31 03 18](#)

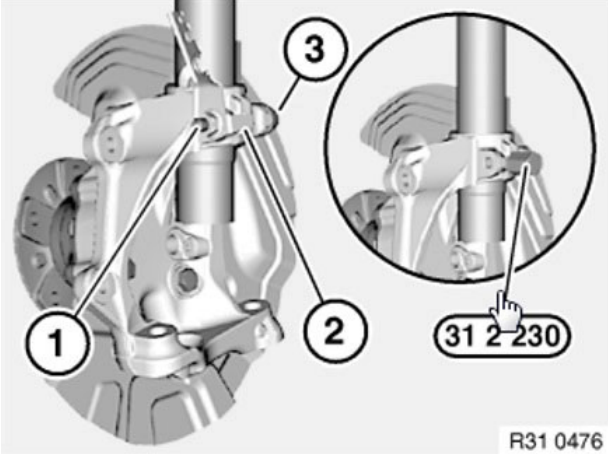
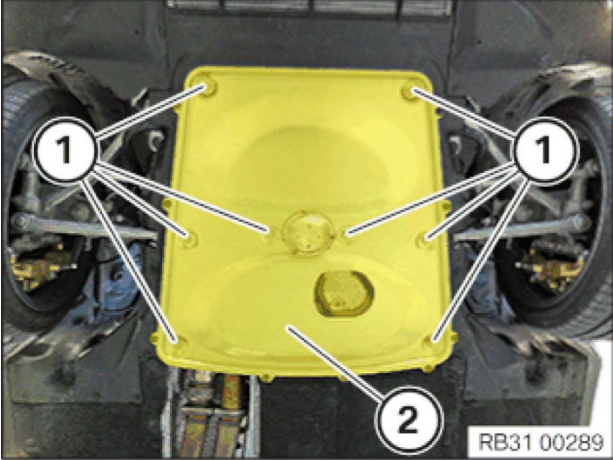
FRONT AXLE STEERING NOISE ELIMINATION

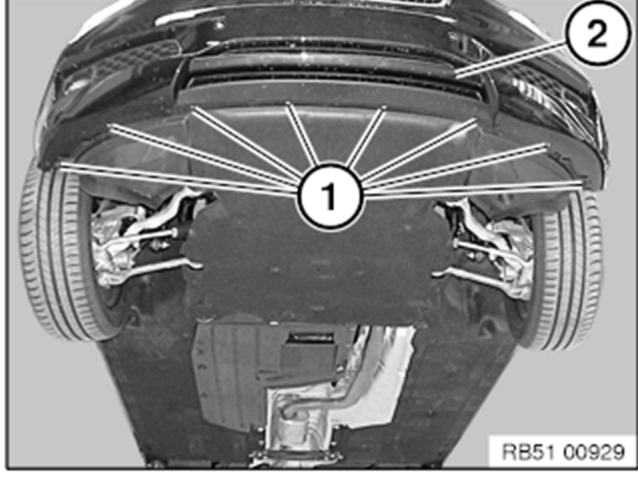
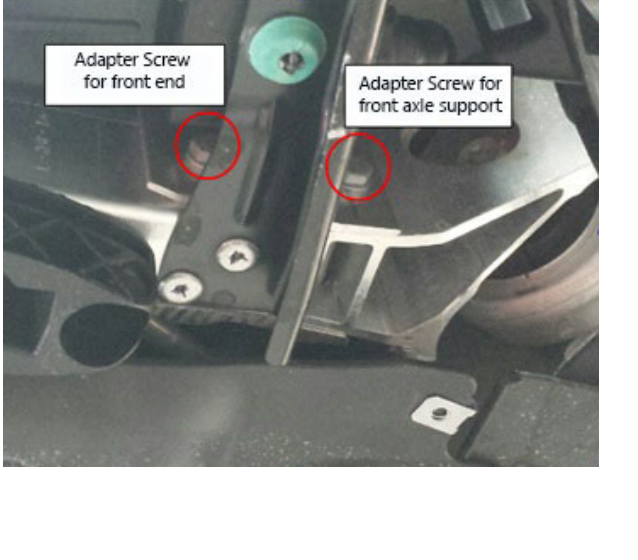
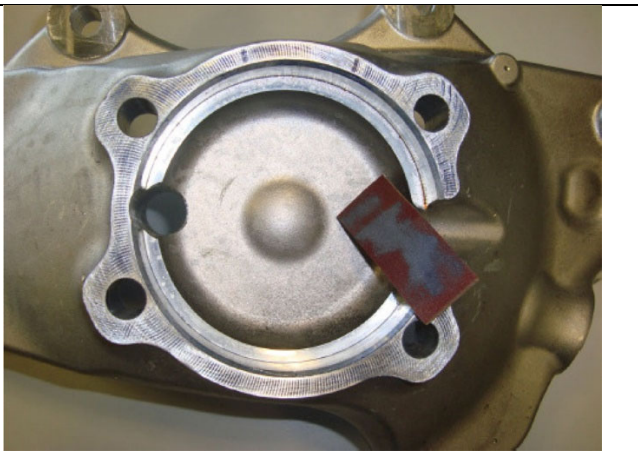
Introduction or Preparatory Items:

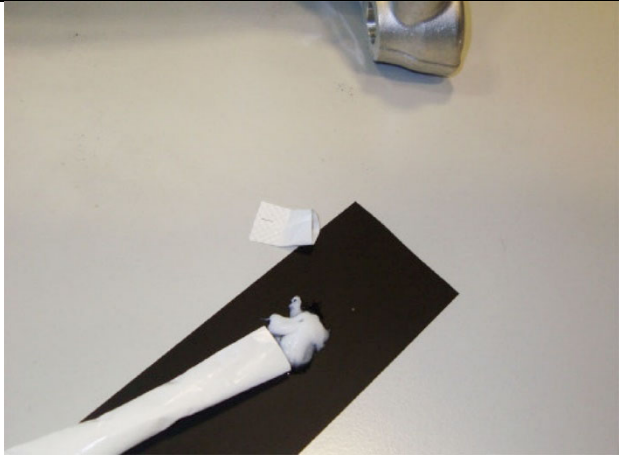
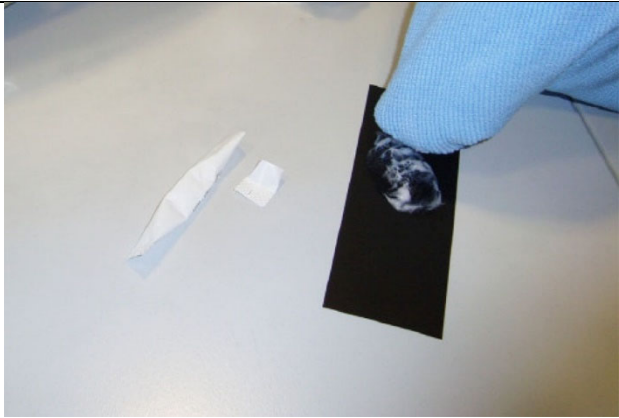

Note: This repair must be performed while the weight of the vehicle is supported on the tires - vehicle on four-column lift (alignment rack) or over service pit.

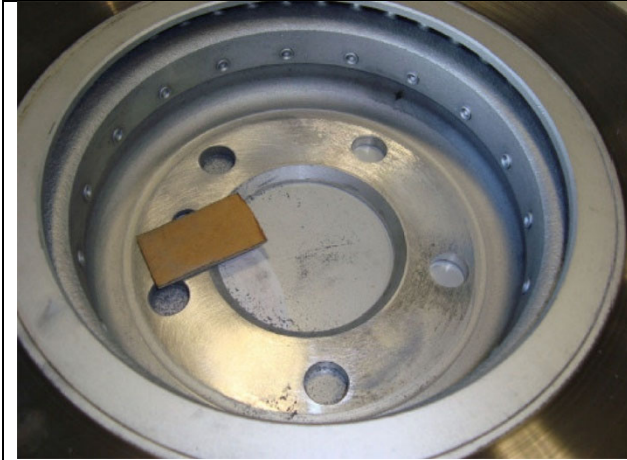
Procedure:

The following procedures should be attempted in **chronological** order to complete the repair with the minimum effort necessary.

	<p>I. Check Spring Strut Shock Absorber</p> <p>A. Remove screw connections of spring strut shock absorber on swivel bearing.</p> <p>B. Replace screw connection (1) to specified torque: Torque: 56Nm</p> <p>C. Reassess the noise.</p> <p>Has the disturbing steering noise been eliminated?</p> <p>YES- the repair is complete.</p> <p>NO – go to next procedure.</p>
	<p>II. Check Stiffening Plate Screws</p> <p>A. Remove the stiffening plate screw connections (1).</p> <p>B. Clean the contact surfaces of stiffening plate.</p> <p>C. Replace the bolts to the specified torque: Jointing torque 56 Nm + 90° angle of rotation</p> <p>D. Reassess the noise.</p> <p>Has the disturbing steering noise been eliminated?</p> <p>YES- the repair is complete.</p> <p>NO – go to next procedure.</p>

	<p>III. Check Front Axle Supports</p> <p>A. Remove front bumper under body panels on left and right side</p>
	<p>B. Release adapter screw connections on front axle supports where shown.</p> <p>C. Retighten screw connection to specified torque: Torque: 19 Nm</p> <p>D. Reinstall front bumper panels on left and right.</p> <p>E. Reassess the noise.</p> <p>Has the disturbing steering noise been eliminated?</p> <p>YES- the repair is complete.</p> <p>NO – go to next procedure.</p>
	<p>IV. Lubricate Wheel Bearing Surface</p> <p>A. Install wheel bearing surface repair kit (part number 83 19 2 298 825).</p> <ol style="list-style-type: none"> 1. Disassemble the wheel bearing according to repair instructions REP 31 21 180. 2. Using the sandpaper, carefully sand the wheel bearing contact face until the surface is evenly roughened while maintaining a flat, planar surface.
<p>Note: Retain sandpaper for later use in this procedure.</p>	

	<p>3. Squeeze the components of the provided lubricant onto a mixing surface and thoroughly blend together.</p>
	<p>4. Rub all of the lubricant mixture into the tip of a folded cloth.</p>
	<p>5. Using the part of the cloth containing the lubricant, rub the wheel bearing contact face, thoroughly working the lubricant into the fine scorings created during sanding.</p> <p>When completed, the surface must be sticky to the touch.</p> <p>Note: There must not be any excess lubricant remaining on the edges.</p>



- B. Remount the wheel bearings.
- C. Using the sandpaper, roughen the inside of the brake disc chamber/wheel bearing contact face, particularly any shiny patches.

Note: There must not be any lubricant applied to the wheel bearing/brake disc contact surface.

- D. Remove any dust from the brake disc chamber with a dry cloth.
- E. Reassemble all components without any further cleaning.