



SIB 31 01 12

2020-08-18

CRACKING NOISES FROM THE FRONTAXLE AREA WHILE TURNING THE WHEELS, WHEN STATION

This Service Information Bulletin (Revision 7) replaces SI B31 01 12 **dated April 2018**.

What's New (Specific text highlighted):

- ALPINA models added
- Procedure
- Parts
- Warranty

MODEL

E70 (X5)	E71 (X6)	F15 (X5)	F16 (X6)
F01, F02 (7 Series Sedan including ALPINA)	F04 (ActiveHybrid 7)	F06 (6 Series Gran Coupe including ALPINA)	F07 (5 Series Gran Turismo)
F10 (5 Series Sedan)	F12 (6 Series Convertible)	F13 (6 Series Coupe)	G12 (7 Series sedan including ALPINA)

For the F80 (M3), F82 (M4), F83 (M4) and F87 (M2) models, refer to SI B31 03 18.

SITUATION

Cracking noises are heard from the front axle area while maneuvering at low speeds (e.g., parking lot maneuvers) or when turning the steering wheel while stationary.

CAUSE

Movement between the contact surfaces of the wheel bearing and swivel bearing (knuckle).

PROCEDURE

Confirm the noise is coming from the front wheel bearing area and remove the front wheel bearing. Use repair kit P/N 83 19 2 298 825 to clean up the mating surfaces of the wheel bearing and the swivel bearing (steering knuckle).

The repair procedure can be found in ISTA/D using the path- Function structure/05 Non-electrical diagnosis- NED/02 Chassis and suspension/01 Interference noise/Front axle interference noise – ABL Front axle interference noises.

PARTS INFORMATION

Part Number	Description	Quantity
83 19 2 298 825	Repair kit	Up to 2

Additionally, other small parts that are not specified above such as one-time screws, nuts and seals, which must be replaced according to the ISTA repair instructions/ETK, must be selected from the Electronic Parts Catalog according to the respective vehicle type and invoiced under the repair defect code below.

Obtain and confirm these additional part numbers for the specific vehicle by entering the chassis number in either ETK or AIR which takes into account specific equipment and/or options.

WARRANTY INFORMATION

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

Defect Code:	3121003900	Wheel bearing/wheel hub, front disruptive noises
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Repairing One Side (Excluding the ALPINA models)

Labor Operation	Description	Labor Allowance
31 21 180	Replacing bearing of front wheel (Main work)	Refer to AIR
Or:		
31 21 578	Replacing bearing of front wheel (Plus work)	Refer to AIR
Or:		
31 21 579	Replacing bearing of front wheel (brake caliper/brake disc removed)	Refer to AIR
Or:		
31 21 580	Replacing bearing of front wheel (wheel removed)	Refer to AIR
And:		
31 99 000	Work time to treat mating surface of wheel bearing/swivel bearing (one side)	3 FRU

Or:

Repairing One Side (F01, F02, F06 and G12 ALPINA models)

Labor Operation	Description	Labor Allowance
31 99 000	Work time to replace bearing of front wheel and treat mating surface of wheel bearing/swivel bearing (one side) (Main work)	11 FRU; 12 FRU (F06 xDrive, G12 xDrive)
Or:		
31 99 000	Work time to replace bearing of front wheel and treat mating surface of wheel bearing/swivel bearing (one side) (Plus work)	10 FRU
Or:		
31 99 000	Work time to replace bearing of front wheel and treat mating surface of wheel bearing/swivel bearing (one side) (brake caliper/brake disc removed)	5 FRU; 6 FRU (F01, F02, G12)
Or:		
31 99 000	Work time to replace bearing of front wheel and treat mating surface of wheel bearing/swivel bearing (one side) (wheel removed)	8 FRU

Or:

Repairing Both Sides (Excluding the ALPINA models)

Labor Operation	Description	Labor Allowance
31 21 181	Replacing both front wheel bearings (Main work)	Refer to AIR
Or:		
31 21 584	Replacing both front wheel bearings (Plus work)	Refer to AIR
Or:		
31 21 583	Replacing both front wheel bearings (brake calipers/brake discs removed)	Refer to AIR
Or:		
31 21 581	Replacing both front wheel bearings (wheels removed)	Refer to AIR

And:		
31 99 000	Work time to treat mating surfaces of wheel bearings/swivel bearings (both sides)	6 FRU

Or:

Repairing Both Sides (F01, F02, F06 and G12 ALPINA models)

Labor Operation	Description	Labor Allowance
31 99 000	Work time to replace both front wheel bearings and treat mating surfaces of wheel bearings/swivel bearings (both sides) (Main work)	20 FRU; - 21 FRU (G12 xDrive)
Or:		
31 99 000	Work time to replace bearing of front wheel and treat mating surfaces of wheel bearings/swivel bearings (both sides) (Plus work)	18 (F01 xDrive, - F02 xDrive) 19 FRU
Or:		
31 99 000	Work time to replace bearing of front wheel and treat mating surfaces of wheel bearings/swivel bearings (both sides) (brake caliper/brake disc removed)	10 FRU (F01 xDrive, F02, xDrive) - 12 FRU (F01, F02, G12); - 13 FRU (G12 xDrive)
31 99 000	Work time to replace bearing of front wheel and treat mating surface of wheel bearing/swivel bearing (both sides) (wheels removed)	16 FRU (F01, F02, G12); - 17 FRU (F01 xDrive, F02 xDrive, G12 xDrive)

Only one Main work flat rate or job/work time labor operation code can be claimed per workshop visit.

As applicable to your center, please refer to **SI B01 01 20** or **B01 07 20** for claiming your diagnosis work time, job/repair work time (WT), WT and repair-related explanation procedures.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Submit feedback at the top of this bulletin
Warranty inquiries	Submit an IDS ticket to the Warranty Department
Parts inquiries	Submit an IDS ticket to the Parts Department

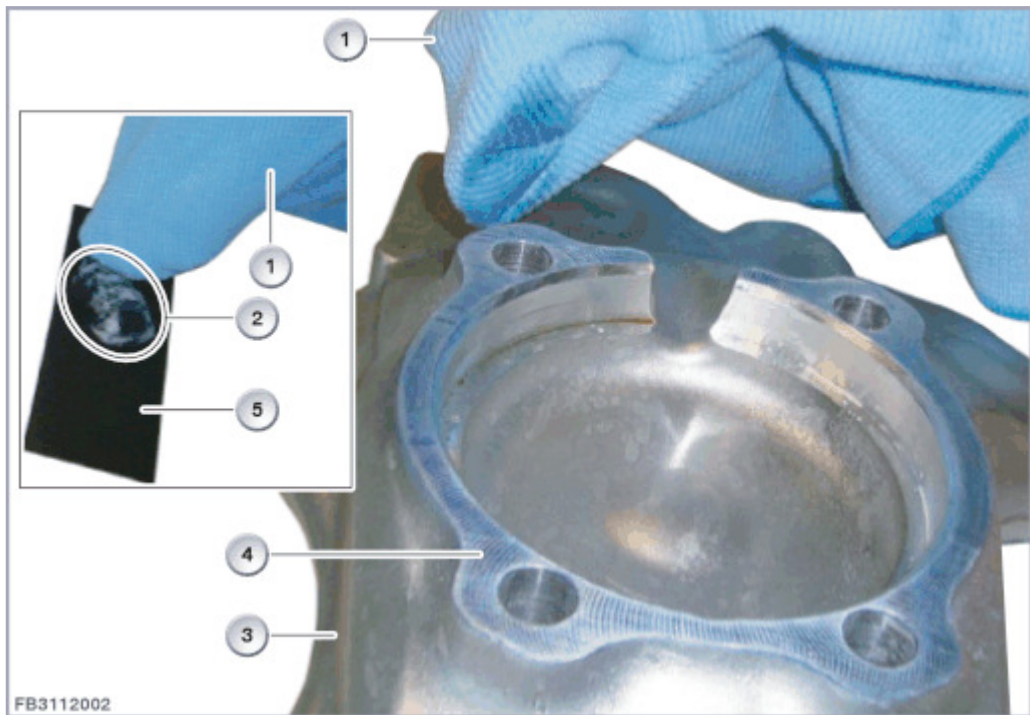
Supporting Materials

[picture_as_pdf B310112_FUB-HIL-RHI-310001.pdf](#)

1	Sanding pad	2	Swivel bearing
3	Contact surface		

2. Grease swivel bearing

- Mix the two-component grease from the repair kit on a clean support and absorb it with a microfibre cloth, see graphic
Note: Rub the two-component grease into the microfibre cloth until it has been completely absorbed!
- Fully rub the two-component grease into the created scoring on the sanded area of the swivel bearing, see graphic
Note: The entire surface must be slightly sticky after this treatment!
- Remove protruding grease
Note: There must not be any grease residue on the screws and threaded holes, otherwise a secure connection from the wheel bearing to the swivel bearing cannot be guaranteed!

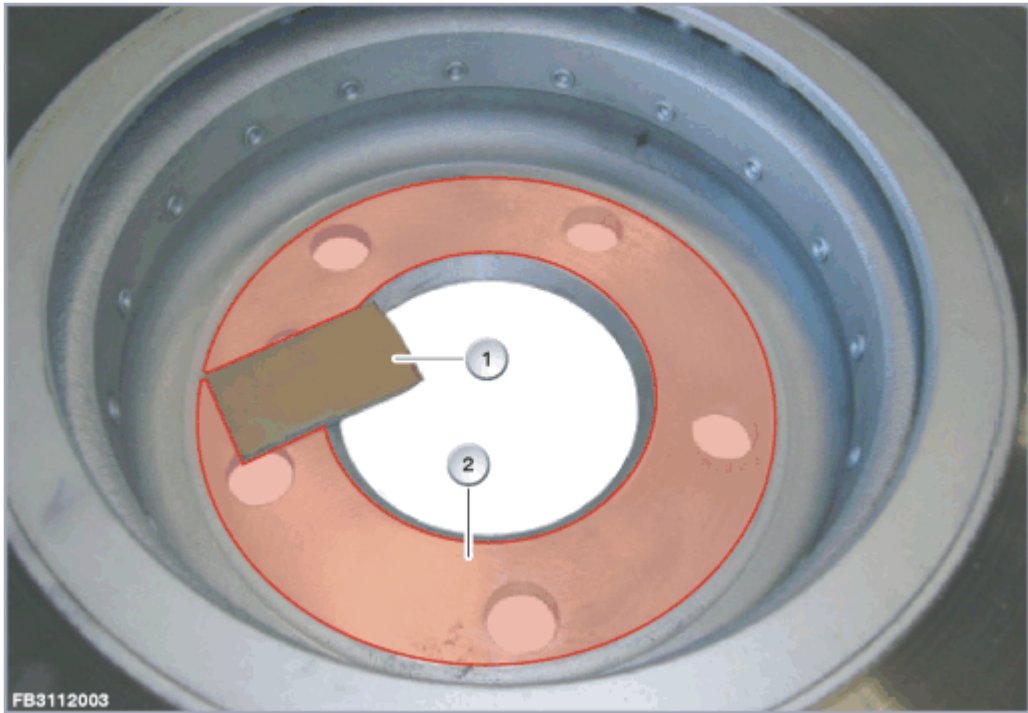


Index	Description	Index	Description
1	Microfibre cloth	2	Two-component grease
3	Swivel bearing	4	Greased contact surface
5	Support		

3. Complete vehicle

- Fit wheel bearing, see [repair instructions](#)

- Sand contact surface on the inside of the brake disc chamber with the supplied sanding pad, see graphic
Note: No grease may be used on the contact surface between the wheel bearing and the brake disc during the assembly! The contact surface must be free of grease!
- Add final details to vehicle



Index	Description	Index	Description
1	Sanding pad	2	Contact surface