



SI B31 01 12
Front Axle

January 2018
Technical Service

UPDATE! CRACKING NOISES FROM THE FRONT AXLE AREA WHILE TURNING THE WHEELS, WHEN STATIONARY OR PARKING

This Service Information bulletin supersedes SI 31 01 12 **dated August 2016**

MODEL

E70 (X5)	E71 (X6)	F15 (X5)	F16 (X6)
F01, F02 (7 Series Sedan)	F04 (ActiveHybrid 7)	F06 (6 Series Gran Coupe)	F07 (5 Series Gran Turismo)
F12 (6 Series Convertible)	F13 (6 Series Coupe)	UPDATE! F80 (M3 Sedan)	UPDATE! F82 (M4 Coupe)
UPDATE! F83 (M4 Convertible)	UPDATE! F87 (M2 Coupe)		

SITUATION

UPDATE! 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: 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	1 or 2

WARRANTY INFORMATION

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

Defect Code:	31 21 00 39 00	
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Repairing One Side

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Labor Operation:	Labor Allowance:	Description:
31 21 180	Refer to KSD	Replacing bearing of front wheel
And:		
31 99 000	3 FRU	Work time to treat mating surface of wheel bearing/swivel bearing (one side)

If you are using a Main labor code for another repair, use the Plus code labor operation 31 21 578 instead.

With a front brake caliper/brake disc removed, use 31 21 579 or if the front wheel is removed, use 31 21 580.

Or:

Repairing Both Sides

Labor Operation:	Labor Allowance:	Description:
31 21 181	Refer to KSD	Replacing bearing of front wheel
And:		
31 99 000	6 FRU	Work time to treat mating surface of wheel bearing/swivel bearing (one side)

If you are using a Main labor code for another repair, use the Plus code labor operation 31 231 584 instead.

With the front brake calipers/brake discs removed, use 31 21 583 or if both front wheels are removed, use 31 21 581.

Refer to KSD2 for the corresponding flat rate unit (FRU) allowances.

Work time labor operation code 31 99 000 is not considered a Main labor operation. Also, since the "work time" FRU allowances to be claimed are specified, a separate punch time is not required.

ATTACHMENTS

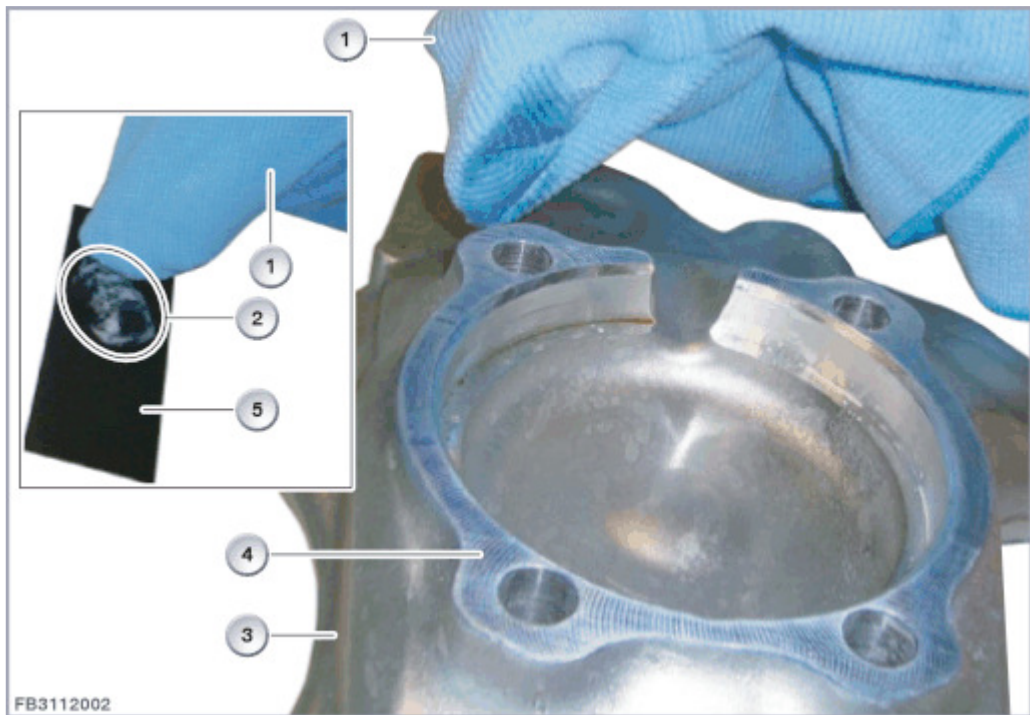
View PDF attachment [20130722_154101_FUB-HIL-RHI-310001_F12](#).

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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!

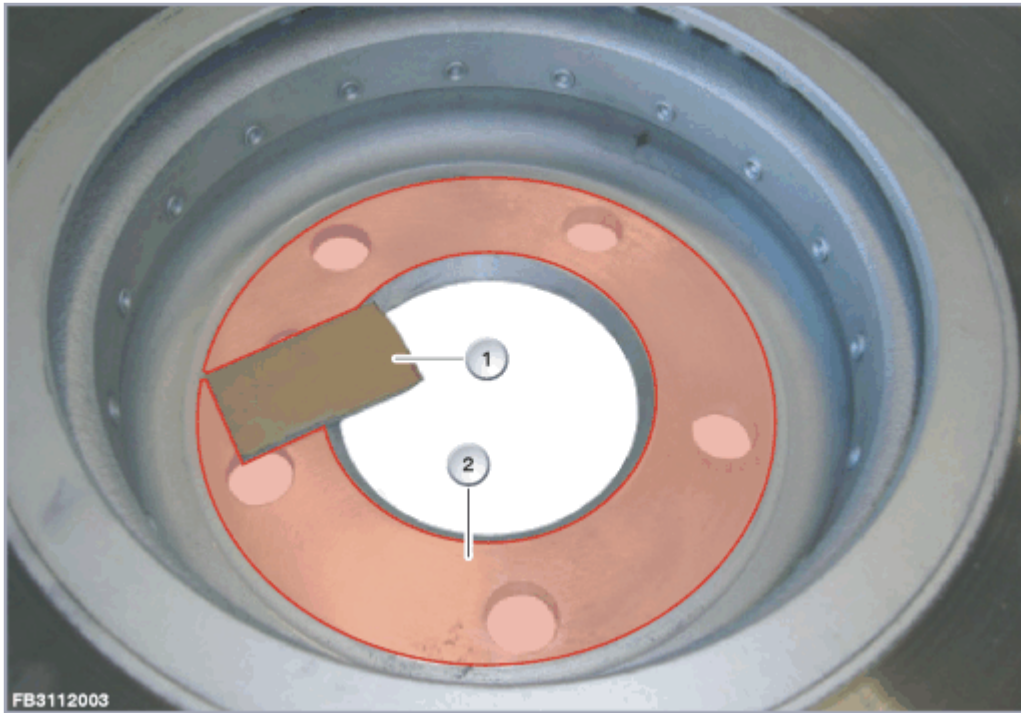


Index	Description	Index	Description
1	Microfibre cloth	2	Two-component grease
3	Swivel bearing	4	Greased contact surface
5	Support		

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