

CRACKING/CREAKING NOISE FROM FRONT AXLE/STEERING SYSTEM

B32 01 23 [SI] March 2023

designates changes to this revision

Complaint

SITUATION

When turning the steering wheel while stationary or when driving on uneven roads; cracking, creaking, or knocking noises may be heard. See attached example sound videos V32 01 23 and V32 02 23.

Cause

CAUSE

The breakaway torque in the thrust bearing of the tie rod is too high.

Measure

MODEL

F95* (X5 M Sports Activity Vehicle)	F96* (X6 M Sports Activity Coupe)	G05* (X5 Sports Activity Vehicle)	G06* (X6 Sports Activity Coupe)
G07* (X7 Sports Activity Vehicle)	G20** (3 Series Sedan)	G22** (4 Series Coupe)	G23** (4 Series Convertible)
G26** (4 Series Gran Coupe)	G29* (Z4 Roadster)	G42** (2 Series Coupe)	G80* (M3 Sedan)
G82* (M4 Coupe)	G83* (M4 Convertible)	G87* (M2 Coupe)	

Only vehicles that are fitted with an Electric Power Steering (EPS) from ThyssenKrupp Presta Steering (TKPS) as noted below.

* Vehicles are fitted with an EPS from TKPS

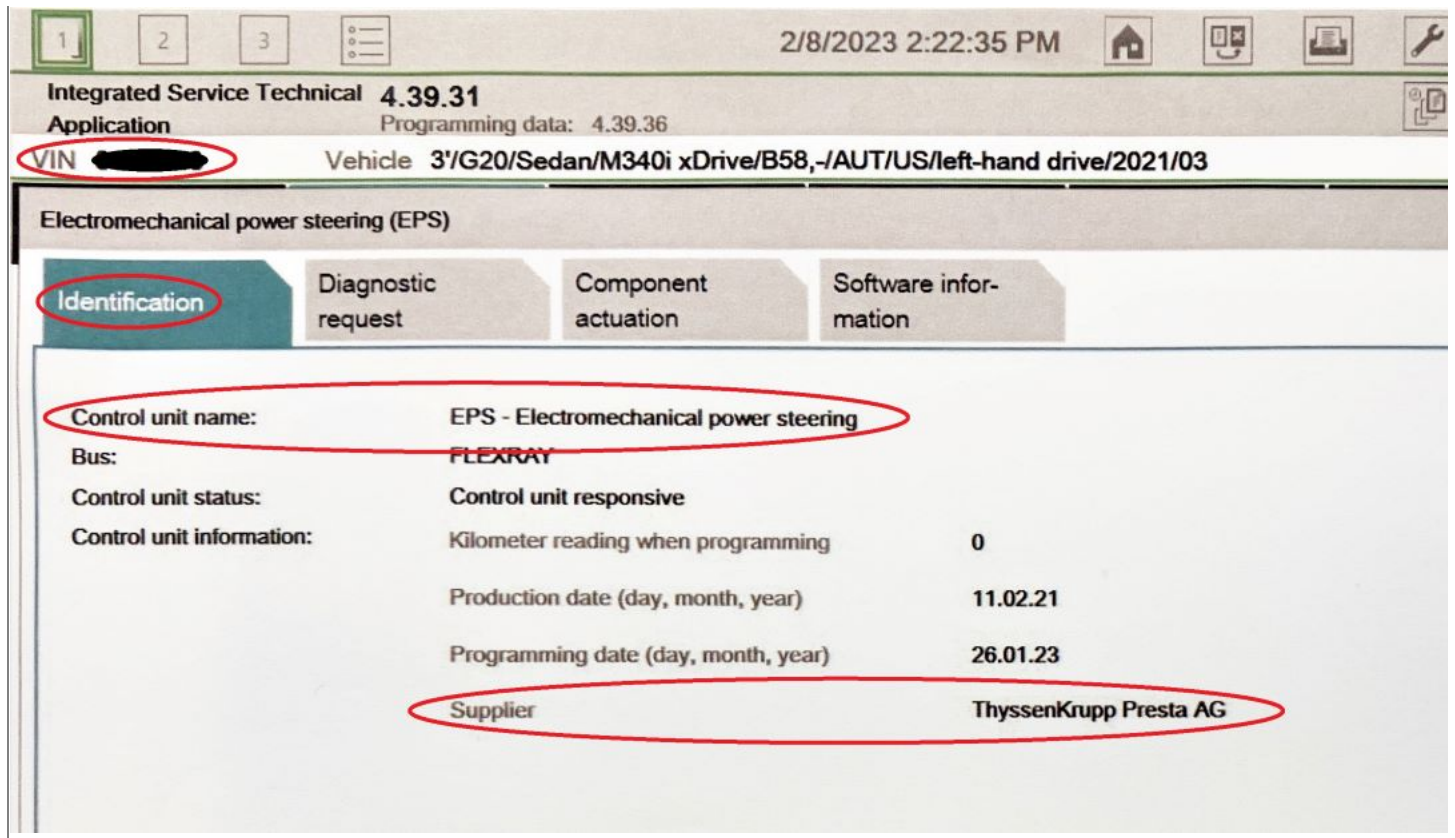
** Vehicles can be fitted with either a TKPS or JTEK EPS (G20, G22, G23, G26 and G42 Only), these vehicles must be checked first to see which EPS is installed.

CORRECTION

Replace one or both tie rod assemblies.

PROCEDURE

For conditions that are like the situation as heard in the videos:



2. On vehicles with the TKPS EPS, replace one or both tie rod assemblies as per REP 32 21 231.

NOTE: G20 vehicles produced up to 04/2019- always replace both tie rods (left and right).

3. Perform wheel alignment check with ride height measurement without loading the vehicle as per REP 32 00 155.

PARTS INFORMATION

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in either ETK or AIR which considers specific equipment and/or options.

Part Number	Description	Quantity
Refer to ETK/AIR	Left tie rod	1
Or/and:		
Refer to ETK/AIR	Right tie rod	1

Additionally, other small parts that are not specified above, such as one-time use 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 special defect code.

CLAIM INFORMATION

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

Defect Code:	3221043900	Track rod, side (incl. ball joint) Unpleasant noises
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Diagnosis

Labor Operation	Description	Labor Allowance
32 99 000*	Verifying the noise Situation described above (Work time)	WT
Or:		
00 58 500*	Diagnosis Worktime Flat Rate	2 FRU

Work time labor operation codes 61 00 006 and 00 58 500 are not considered Main labor operations.

Verifying that a TKPS EPS is Installed (G20, G22, G23, G26 and G42 Model Vehicles Only)

Labor Operation	Description	Labor Allowance
00 00 006	Carrying out vehicle test (Main work) (See the note Main and Plus note below)	Refer to AIR
Or:		
00 00 556	Carrying out vehicle test (Plus work)	Refer to AIR
And:		

61 21 528	Supporting voltage of the vehicle electrical system / recharging vehicle battery	Refer to AIR
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Repairing One Side

Labor Operation	Description	Labor Allowance
32 21 231	Replacing left or right tie rod (Main work) (See the note Main and Plus note below)	Refer to AIR
Or:		
32 21 734	Replacing left or right tie rod (Plusposition)	Refer to AIR

Or:

Repairing Both Sides

Labor Operation	Description	Labor Allowance
32 21 251	Replacing tie rods left and right (Main work) (See the note Main and Plus note below)	Refer to AIR
Or:		
32 21 737	Replacing tie rods left and right (Plusposition)	Refer to AIR

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006, or exclude (including 61 21 528) when the Vehicle Test is included in another repair.

The Main and Plus code labor operation usage also applies to labor operations 32 21 231/734 and 32 21 251/737, especially for the G20, G22, G23, G26 and G42 model vehicles.

Following the replacement repair instruction that applies to the vehicle, after which:

Checking Wheel Alignment/Adjusting Toe-In on Front Axle

Labor Operation	Description	Labor Allowance
32 00 595	Kinematics Diagnosis System wheel alignment with ride height measurement without loading the vehicle (Plusposition)	Refer to AIR
And:		
32 00 601	Adjusting toe-in on front axle (Associated work, without commissioning electromechanical steering gear)	Refer to AIR
And:		
32 13 905	Commissioning of electromechanical steering gear (EPS) / initialization (after vehicle diagnosis)	Refer to AIR
And, when needed:		
32 00 650	Additional work for integral active steering (HSR) Associated work (after vehicle diagnosis) (If applicable)	Refer to AIR

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

Note: Refer to the Steering and wheel alignment / Electronic wheel alignment section in AIR (Search reference labor operation code 32 00 155) for other additional alignment-related work that may also be required to be performed.

*Based on which one applies to your center, please refer to **SI B01 01 20** or **B01 07 20** for the applicable procedure for documenting, claiming, and explaining, on the RO and in the claim comments, your diagnosis work time (WT), job/repair work time (WT), and the vehicle repairs your center performed, unless otherwise required by State law.

FEEDBACK REGARDING THIS BULLETIN

Technical Feedback	To submit feedback for the technical topic of this bulletin: Submit your feedback in the rating box at the top of this bulletin
Warranty Feedback	To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal
Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department

Validity information

Service Information Bulletin Metadata

Model series: G22, G26, G87, G23, G42, G07, G80, G82, G83, G20, G05, F96, G06, G29, F95
 Engine range: B58D, S58T, B46D, B48D, B58N, XE2, S68T, XB1G, HA0, S58O, B58C, B57O, N63M, N63B, S63M, XB1
 Body style: COUPE, CABRIO, GEFZG, LIM, SC, ROADST
 Fault codes:

Repair overviews
