



SIB 12 07 21

2024-03-04

B58C/D (48V SYSTEM): Belt Slip Fault 21B209

This Service Information Bulletin (Revision 3) replaces SI B12 07 21 **dated November 2023**.

What's New (Specific text highlighted):

Parts List Updated

MODEL

G05 (X5 Sports Activity Vehicle)	G06 (X6 Sports Activity Coupe)	G07 (X7 Sports Activity Vehicle)	G20 (3 Series Sedan)
G22 (4 Series Coupe)	G30 (5 Series Sedan)	G32 (640i xDrive Gran Turismo)	
With the B58C/D and 48V system			

SITUATION

Check Control message (CCM) indicates:

- (ID 213): Stop, exercising due care. Voltage supply

The Service Engine Soon light is on with the following DME Fault Code:

- 21B209 - Starter alternator / belt for 48V system (OSA_RIEMEN_RISS): Belt between Combustion engine and starter generator torn

And/or one or more of the following other issues are also occurring:

- Noise in the area of the belt drive.
- Odor from the engine compartment.
- Smoke formation in the area of the belt drive.
- Drive belt damaged or prematurely worn.
- Torn drive belt.

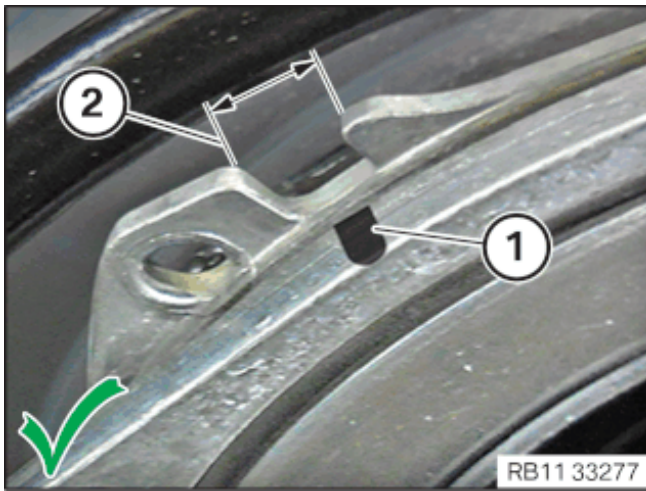
CAUSE

Slipping of the drive belt under certain operating conditions, especially in overrun (off throttle) operation at low engine speed.

PROCEDURE

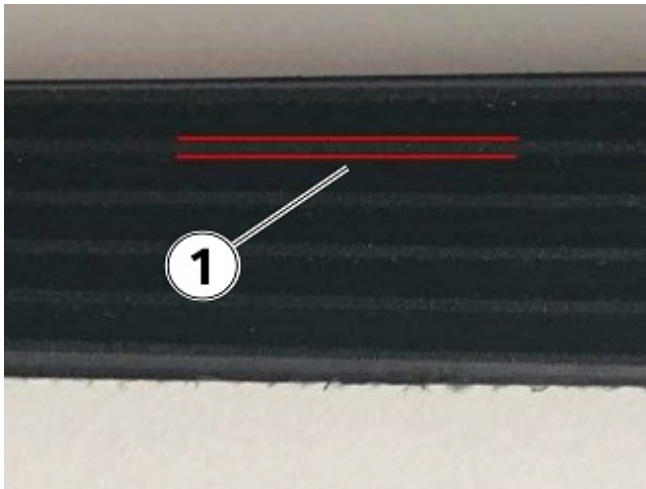
Proceed with the following steps-

- Perform diagnosis with ISTA and follow any test plans related to the FC and 48V system
- Check the alignment marks on the belt tensioner



- Black mark (1) on tensioner needs to be centered in adjustment window (2)

- Remove and visually inspect the drive belt (the belt will be replaced)
 - The drive belt may already show visible wear on the side with the ribs
 - The belt may be cut or missing ribs
 - There may be signs of oil contamination



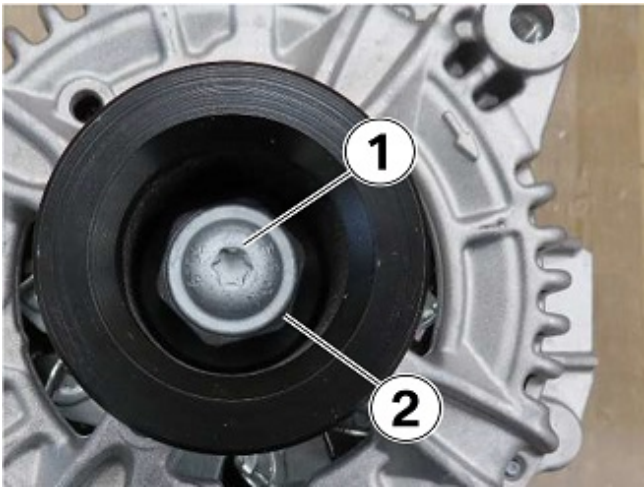
- The ribs may be narrower or worn thin (1).

- Using a mirror, check the index number of the crankshaft damper



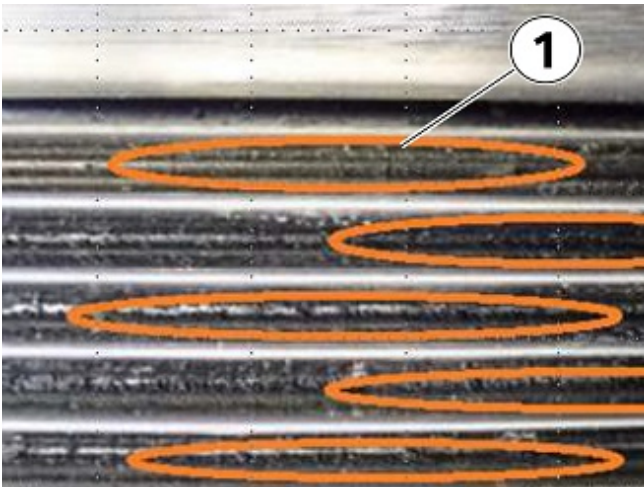
- Replace the damper if has an index number 01

- Inspect the pulley on the starter generator for tightness



- Check the retaining screw (1) for the hexagon nut (2) on the SGR drive pulley.

- If the retaining screw is loose (finger tight) or missing, the starter generator must be replaced
- If the retaining screw is tight – Check the pulley grooves for belt material and clean any debris from the pulley with brake cleaner and a cloth rag (no wire brush)
- Check that the SGR pulley spins freely. Take a video of any binding of the pulley
- Check the pulley on the water pump
- Check for binding in the pump and ensure the pulley spins true
- Take a video of any issue with the water pump (if there is any) and replace the pump
- AC Compressor - Check the pulley grooves for belt material and clean any debris from the pulley with brake cleaner and a cloth rag (no wire brush)
- If there is any issue with the AC compressor or the pulley (damage or leaking), replace the AC compressor



- Example: Belt debris in pulley grooves (1).

PARTS INFORMATION

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

Part Number	Description	Quantity
11 28 9844643	Ribbed v-belt (6PKx1196 (48V))	1
11 23 9845162	Vibration Damper	1

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11 23 8585220	ASA-Bolt (M10x65)	4
11 11 8664905	Shaft seal (55x68x8)	1

CLAIM INFORMATION

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

Defect Code:	1128026900	Ribbed V-belt, main drive Worn / sheared through
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Refer to AIR for the corresponding flat rate unit (FRU) allowances.

Labor Operation	Description	Labor Allowance
00 00 006	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)	Refer to AIR
Or:		
00 00 556	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)	Refer to AIR
And:		
61 21 528	Support voltage of the vehicle electrical system / recharge vehicle electrical system battery	Refer to AIR
And, as necessary:		
61 00 006*	Performing vehicle diagnosis – test module	Work time (WT)
Or		
00 58 500*	Diagnosis Worktime Flat Rate (See below)	2 FRU
And:		
11 28 575	Removing and installing/replacing drive belt for starter motor generator	Refer to AIR
And:		
11 28 940	Additional work with replacing drive belt for starter motor generator (Associated work)	Refer to AIR
Or:		
11 23 510	Removing and installing/replacing vibration damper	Refer to AIR
And:		
11 99 000	Work time for inspecting and cleaning pulleys on drive belt components (3 FRU) and in conjunction with 1128 575 and 11 28 940 or 11 23 510, the additional work for replacing belt tensioner for drive belt of starter motor generator (3 FRU)	6 FRU

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.

Additional/Other Repair Work

If additional and/or other covered repair work is performed after carrying out the ISTA diagnostics and the related test plans, claim this additional work with the defect code listed above or with the one in AIR that applies. Also include any other necessary labor operations that also apply (with the overlapping labor removed) including the diagnosis that applies*.

*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

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Technical Feedback	To submit feedback for the technical topics 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

