



ENGINE VIBRATIONS OR NOISE

MODEL

F10 (5 Series Sedan)	F15 (X5 Sports Activity Vehicle)	F22 (2 Series Coupe)	F23 (2 Series Convertible)
F25 (X3 SAV)	F26 (X4 Sports Activity Coupe)	F30 (3 Series Sedan)	F31 (3 Series Sports Wagon)
F32 (4 Series Coupe)	F33 (4 Series Convertible)	F34 (3 Series Gran Turismo)	F36 (4 Series Gran Coupe)
F39 (X2 SAC)	F48 (X1 SAV)	G01 (X3 SAV)	G02 (X4 SAC)
G05 (X5 SAV)	G12 (7 Series Sedan)	G30 (5 Series Sedan)	G32 (640i xDrive Gran Turismo)

with B4x or B5x engines

SITUATION

One of the following complaints may be reported:

- The engine runs erratically
- The engine causes vibrations when running
- Grinding noise from the engine compartment when engine is running

One or more of the following check control messages may be displayed:

Fxx Series:

Message	Identification code
Vehicle battery is not being charged!	213
Engine too hot! Drive gently	257
Engine overheated! Stop carefully	39

Gxx Series:

Message	ID code
Battery is not being charged	960
Stop, exercising due care. Voltage supply.	213
It is possible to continue driving. Engine temperature.	257

Stop, exercising due care. Engine overheated!	39
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The following fault may be stored in the DME/DDE:

Gasoline: FC 210601 - Alternator, mechanical: Malfunction

Or

Diesel: 2A1100 - Alternator (Layer ISGGENME): mechanical fault

CAUSE

The vibration damper rubber insulator located between the drive belt pulley and its center hub has either partly or fully separated (torn). The separation will allow the two components to move independently from each other.

PROCEDURE

1. Check the vibration damper, Remove the drive belt and refer to Repair instruction 11 28 010 "Removing and installing/replacing alternator drive belt". Visually inspect the vibration damper for cracks in the rubber insulator. Refer to the attachment for descriptions.

2. If cracks or damage to the vibration damper are visible or if the hub and belt pulley are no longer connected then replace the vibration damper.

Refer to Repair instruction 11 23 010 "Removing and installing/replacing vibration damper".

3. Check all belt-driven components for damage.

Check the alternator:

Spin the alternator by hand with the drive belt removed.

If the alternator rotates freely, i.e. without loud grinding noise or resistance, the alternator is OK. A slight grinding noise of the carbon brushes is normal.

Check axial and radial directional play in the alternator shaft. If there is no play, the alternator is OK

PARTS INFORMATION

Refer to the ETK using the VIN of the vehicle.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks or the BMW Certified Pre-Owned Program.

Defect Code:	1123000100	
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Without the MIL Illuminated/Stored Faults

Labor Operation:	Labor Allowance:	Description:
11 23 010	Refer to AIR/KSD2	Removing and installing/replacing vibration damper (Main work)
Or:		

11 23 510	Refer to AIR/KSD2	Removing and installing/replacing vibration damper (Plus work)
And, as needed:		
11 99 000	Work time (WT)	Work time as need to visually inspect the vibration damper (Drive belt removed)

If you are using a Main labor code for another repair, use the Plus code labor operation 11 23 510 instead of 11 23 010.

Or:

With the MIL Illuminated/Stored Faults

Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to AIR/KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults) (Main work)
Or:		
00 00 556	Refer to AIR/KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults) (Plus work)
And:		
61 21 528	Refer to AIR/KSD2	Connect an approved battery charger/power supply (indicated in KSD2 as "Charging battery")

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.

And, additionally for the:

e-Vehicle

Labor Operation:	Labor Allowance:	Description:
61 25 910	Refer to AIR/KSD2	Recharging high-voltage battery unit (to high voltage charging socket)

And:

Labor Operation:	Labor Allowance:	Description:
11 23 510	Refer to AIR/KSD2	Removing and installing/replacing vibration damper (Plus work)
And, as needed:		
11 99 000	Work time (WT)	Work time as need to visually inspect the vibration damper (Drive belt removed)

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

Work time labor operation code 11 99 000 is not considered a Main labor operation; however, it does require an individual punch time and an explanation on the repair order and in the claim comments section.

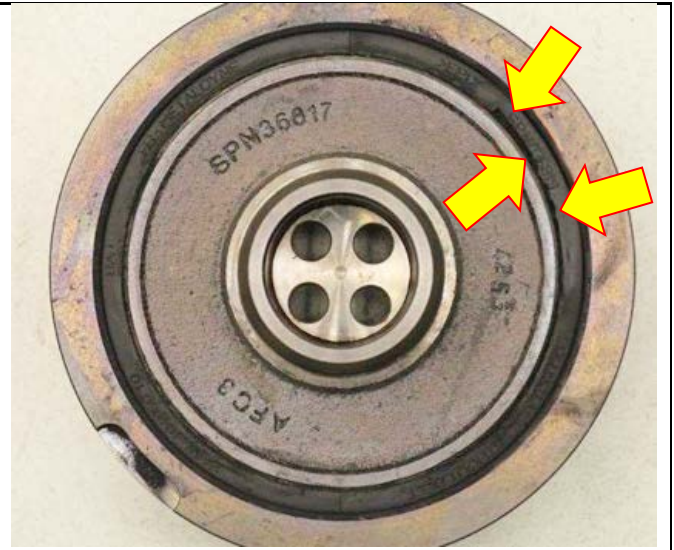
ATTACHMENTS

View PDF attachment [B110119 Attachment Vibration damper damage.](#)

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**Partial or full detachment damage of the crankshaft vibration damper:
B4x, B5x engines**

Partially damaged/detached bonded rubber insulator between damper center hub and the outer belt pulley.



Fully separated/detached rubber insulator.

