



ENGINE VIBRATIONS OR NOISE

This Service Information bulletin replaces SI B11 01 19 dated February 2019

What's New:

- G07 added
- Procedure modified

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) | G07 (X7 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 |

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.

The separation will cause vibrations and or noises from the engine compartment. In some cases the belt could sustain damage.

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 **and the drive belt.**

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

3. Check all belt-driven components for damage.

Spin the alternator, water pump and all auxiliary pulleys by hand with the drive belt removed. If all rotate freely, i.e. without loud, grinding noises or resistance, then they are OK. A slight grinding noise of the alternator carbon brushes is normal.

Check axial and radial movement of the alternator, water pump and all auxiliary pulleys. If there is no play, then the components are OK.

If damage is detected then replace the parts as needed.

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: | 11 23 00 01 00 | Vibration damper (crankshaft) cracked/broken off |
|---------------------|-----------------------|---|

Without the MIL Illuminated/Stored Faults

| Labor Operation: | Labor Allowance: | Description: |
|-------------------------|-------------------------|---|
| 11 23 010 | Refer to AIR | Removing and installing/replacing vibration damper (Main work) |
| Or: | | |
| 11 23 510 | Refer to AIR | Removing and installing/replacing vibration damper (Plus work) |
| And, as needed: | | |
| 11 99 000 | Work time (WT) | Work time as needed to visually inspect the vibration damper and all drive belt pulleys. (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 | Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work) |
| Or: | | |
| 00 00 556 | Refer to AIR | Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work) |
| And: | | |
| 61 21 528 | Refer to AIR | Connect an approved battery charger/power supply (indicated in AIR 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 | Recharging high-voltage battery unit (to high voltage charging socket) |

And: 

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

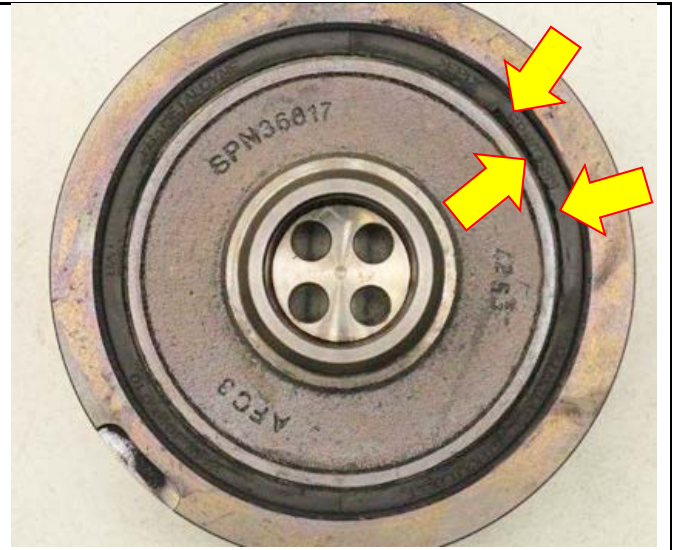
Refer to AIR for the corresponding flat rate unit (FRU) allowances.

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.

© 2019 BMW of North America, LLC

**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.

