



SI M11 01 19
Engine

February 2019
Technical Service

ENGINE VIBRATIONS OR NOISE

MODEL

F54 (MINI Clubman)	F55 (MINI Hardtop 4 Door)	F56 (MINI Hardtop 2 Door)	F57 (MINI Convertible)
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with B3x or B4x 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:

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

FC 210601 - Alternator, mechanical: malfunction may be stored in the DME.

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.

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 MINI New Passenger Car Limited Warranty or the MINI NEXT/MINI Certified Pre-Owned Limited Warranty.

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")
And:		
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 00 00 556 instead of 00 00 006.

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.

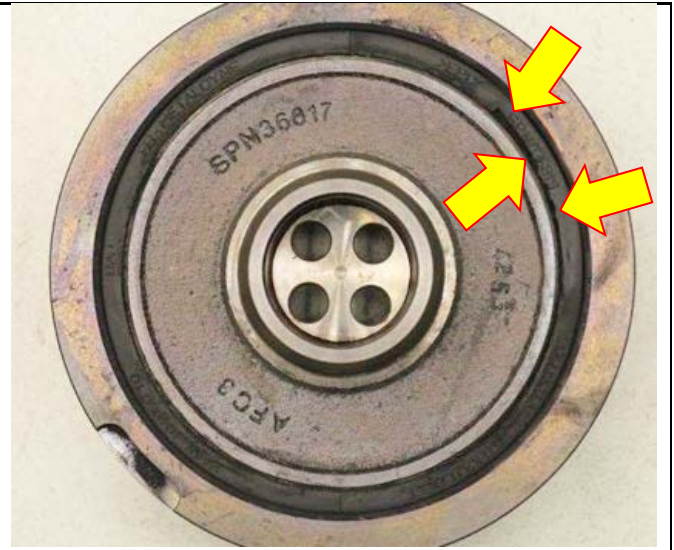
ATTACHMENTS

View PDF attachment [M110119 Attachment Vibration damper damage](#).

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**Partial or full detachment damage of the crankshaft vibration damper:
B3x, B4x engines**

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



Fully separated/detached rubber layer.

