

A/C - Underhood Rattle Noise on Hard Acceleration

File In Section: 01 - HVAC

Bulletin No.: 03-01-38~019A

Date: September, 2004

TECHNICAL

Subject:
Underhood Rattle Noise Heard On Acceleration (Check A/C System Performance and Compressor Operation)

Models:
2003-2004 Cadillac CTS
2002-2004 Cadillac Escalade, Escalade EXT
2003-2004 Cadillac Escalade ESV
2002-2004 Chevrolet Avalanche, Express, Silverado, Suburban, Tahoe
2002-2004 GMC Denali, Denali XL, Savana, Sierra, Yukon, Yukon XL
2002-2004 Commercial Upfitter Chassis Vehicles

with Air Conditioning (A/C)

This bulletin is being revised to update the service procedure and parts information. Please discard Corporate Bulletin Number 03-01-38-019 (Section 01 - HVAC).

Condition

Some customers may comment about an underhood rattle noise heard on acceleration or a sudden loss of A/C system performance.

Cause

This condition may be caused by liquid slugging of the A/C compressor. This condition may cause an internal failure in the A/C compressor. The serpentine belt tensioner and serpentine belt may also be damaged.

Correction

Technicians are to check the A/C system performance and compressor operation using the following repair procedure:

1. Open the hood and inspect the A/C compressor for damage and to see if the compressor is seized. Verify that the serpentine belt is not damaged or missing. If the A/C compressor is seized, proceed to Step 5.
2. Perform the A/C System Performance test. Refer to the Heating, Ventilation and Air Conditioning (HVAC) section of SI. Correct any performance concerns or [refrigerant](#) leaks that are found.
3. Inspect the vehicle for other possible sources of A/C compressor noise or performance concerns. Refer to Corporate Bulletin Number 01-01-38-013 for more information.
4. After all other possible sources of A/C compressor noise or performance concerns have been eliminated, only then should the A/C compressor be replaced.
5. Remove the A/C compressor. Refer to the A/C Compressor Replacement procedure in the HVAC section of SI.
6. Inspect the transmission cooler lines for damage due to contact from the serpentine belt. Replace the transmission cooler lines if necessary.
7. Install an inline A/C system filter. Refer to Corporate Bulletin Number 01-01-38-006C for more information about A/C system flushing and filter installation procedures. An A/C system flush is not to be done unless prior authorization is given by the GM Area Service Manager (in Canada, the District Service Manager).
8. Install an A/C Suction Screen. Refer to Corporate Bulletin Number 01-01-39-003A for more information about A/C suction screen repair recommendations and procedures.
9. Install a new A/C compressor. Refer to the Compressor Replacement procedure in the HVAC section of SI.
10. Install a new orifice tube for the front A/C system. Refer to the Expansion (Orifice) Tube Replacement procedure in SI.
11. If the vehicle is a 2003 model year Chevrolet Express or GMC Savana van, the vehicle may require a new accumulator. Refer to Corporate Bulletin Number 03-01-38-016 for more information. This bulletin refers to an updated design accumulator that may improve the performance of the A/C system.
12. Install a new serpentine belt tensioner and serpentine belt if they have been damaged due to A/C system slugging or an A/C compressor seizure. The serpentine belt tensioner may have broken stop tabs and/or a missing front cap.
13. Verify proper operation of the A/C system.

Part Number	Description	Qty
89016656 (*A/C Delco Part # 15-10413)	Universal In-Line A/C Filter	1

Parts are currently available from GMSPO.
*This filter may also be purchased through your local
A/C Delco distributor.

Parts Information

Warranty Information

Labor Operation	Description	Labor Time
D4440	Compressor Assembly – Replace	Use published labor operation time

For vehicles repaired under warranty, use the table.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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